

SEQUENCE LISTING

SEQ ID	NMB	Sequence
1	0010	MAFLKLTEQNVQGKTVLIRADMNVPFKDGKISDDTRIRASLASIKYCVDNGASIVMTHLGRPTEGEFHPEDDVAP VAAHLGSSLGKDVKVLNDWRENKPALNAGDVMI.QNVRINKGEKNDLELKGAYASLCDVFVNDAFGTAHRAQAST EAVAQAAPVACAGVLMAGELDALGKALKQPARPMVAIVAGSKVSTKLTIESTLADKVDQLIIVGGGIANTFLLAEGK AIGKSLAEHDLVEESKKIMAKMAAKGGSVPLPTDVVVAKAFAADEAEAVVKDIAADEAEAVVKDIADEAEDMILDIG PKSAAALADLLKAAGTVVWNGPVGVFEDQFAGGTAKALEAIAQSKAFSIAGGGDTLAAIAKFGVTEQIGYISTGG GAFLFLEGKELPAVAALEKRG
2	0018	MNTLQKGFTLIELMIVIAIVGILAVALPAYQDYTARAQVSEAILLAEGQKSATVTEYYLNHGEWPGNNTSAGVATS SEIKGKYVKSVEVKNGVVTQMASSNNNEIKGKLSLWAKRQNGSVKWFQPVTRDKAKAANDDVTAAGANGK KIDTKHLPSTCRDASDAS
3	0030	MTRKILVTSALPYANGSIHLGHMVEHIQTDVWVRFQKLRGHACHYCCADDTHGTPVMLAAQKQGIAPEDMIAKVRE EHADFTGFFIGYDNYYSTHSPENKQFSQDIYRALKANGKIESRVIEQLFDPEKQMFPLPDFVKGECPKCHAQDQY GDNCEVCGETTYSPTELINPYSAVSGTKPELRESEHFFFKLGECAFDFLKAWTSGNNPHDGKPHLQAEALNMKWEWLGE GEETTYSQDISRDAPYGFEPDAPGKYFVWLDAPVGYMASFKNLCDRIGVDFDEYFKADSQTEMYHFIGKDI LYFHALFWPAHLFSGHRAITCWTMGEITVDGOKMSKSRGTFITAKSYLEQGLNPEWMRYYIAAKLNSKIEDIDL NLQDFISRVNSDLVGKYVNAARASGFIAKRFEGRILKDVADSEIATGTAQSAIAEYCYESREYAKALRDIMALAD IVNEYDANKPWELAKQEGQDERLHEVCSELINAFTMLTAYLAPVLPQTAANAAKFLNLEAITWANTKREHICKHAL NRYEHLNORVEOKQVDDLEANKSIAAAAAPAAEKGYEKVAEQAQASFDDFMKIDMRVAKVLNCEAVEGSKLLKF DLDGFKEKRIIFSGIAASYPNPAELNGRMVIAVANFAPRKMAKFGVSEGMLSAATADGKLKLLDVTGAQPGDKV G
4	0038	MPQNTLNIVLAAGKGTRMYSKMPKVLHRIGGKPMVGRVIDTAAALNPQNIUVVIGHGKEQVLDTVKRDVWWVEQT EQLGTGHAVKTAIPHSAEGRRTLVLGYDVLIDVETLETLLAAGNEVGLLTDVNPNDPTGLGRIIRDSNGSVTAIV EEKDADAVQKAVKEINTGILVLPNAKLENWLNSLSSNNAQGEYYLTDLIAKAVADGIKVHPVQVRASHLAAVGNNK LQLTELERI FOTEQAQELLKAGVTLRDPARFDLRLRGLKHGQDVVIDVNCIFEGDIELGDNVEIGANCVINKAIGA NSKIAPIFSHLESCEVGENNRIGPYARLRPQARLADDVHVGNFVEIKNAAIGKTKANHLYIGDAEVGCKTNFGAG TIIANYDGVHKHKTIVGDEVRIGSNCLVAPVTLGNKVTTGAGSTITRNVENDKLALARARQTVIEGWVRPEKDKQ
5	0045	MFSFFRRKKQETPALEEAQIQAETAAKAESELAQIVENIKEDAESLAESVKGQVESAVETVSGAVEQVKEVAA SEAEAAAEEKAEEQVEAAKEAVAETVGEAVGQVQEAVATTEEHKLGWAARLKQGLTKSRDKMAKSLAGVFGGQIDE DLYEELETVLITSDMGMEATEYLMKDVDRVSLKGLKDGNELRGALKEALYDLIKPLEKPLVLPETKEPFVIMLAG INGAGKTTSIGKLAKYFQAQGKSVLLAAGDTFRAAAREQLOQAWGERNNVTVISQTTGDSAAVCFDAVQAAKARGID IVLADTAGRLPTQLHLMEEIKVKVRLQKAMPDAPHEIIVVLDANIQGNAVNQVKAFDDALGLTGLIVTLDGTAK GGIIALASDRPVPVRYIGVGEGLDDLRPFDARAFVDA
6	0051	MNTDNLHDILDEMVGQVYSQKKQSRSETPAEIGAHFPLLDRLCETAEAQNASDILISKGFPPSLKINSALTPQPK ALTGEETAAIAASTMNAEQAEIFRDRGEINYSQSRSGTRYRANAYHSQGSAGLVLRRINHVIQPMQELGLPEKLN DLAVAPRGLLIIIVGPTGSGKSTTMMATMLEHRNKTLPISHIVTIEDPIEFYKPRRCIFTQREIGVDTINWQTAQVNA MRQSPDVVCIGEVRSRESMEYAMQLAQTHLCIIFTLHANTAPQSLERILNFYPKEQHQNQILIDIALNLTGTICQRL ALKQDKTGRTAVVVDLLINTPAIQDFILKGDLMNISKIMETAKTDGMQTMQDQNLFELYRHHGIIISYEALRQSVSANN LRLHIQLHKEGKTPELLYDRVNGLNLS
7	0052	MQITDLLAFGAKNKASDLHLSGGISPMLRVMRHMRRINLPEMSAEEVGNMVTSMNDHQRKIYQQNLEVDFSFELP NVARFRVNAFNIGRGPAAVFRTIPSTVLSLEELKAPSIFQKIAESPGRMVLTGPTGSGKSTTAAQMINYINETQP AHILTIEDPIEFVHQSKKSLINQRELHQHTLSFANALRSALREDPDVILVGEMLRDPEIGLALTAATGHLVFGTL HTTGAAKTVDRIVDVF PAGEKEMVRSMLESLSLTAVISQNLKTHDGNGRVASHEILIANPAVRNLIRENKITQINS VLTGQASGMQTMQDQLSQLVLRQGLIAPEVARRRAQNSESMSF
8	0068	MQNNNEFKIGNRSVGVNHEPLIICEIGINHEGSLKTAFEMVDAAYNAGAEVVKHOTHIVEDEMSDEAKQVIPGNAD VSIYEIMERCALNEEDEIKLKEYVESKGMI FISTPFSRAAALRLQRMDI PAYKIGSGECNNYPLIKLVASFGKPII LSTGMNSIESIKSVEIIREAGVPYALLHCTNITYPTPYEDVRLGGMNDLSEAFPDAIIGLSDHTLDNYACLGAVAL GGSILERHFTDRMDRPGPDIVCSMPDTFKELQKGHALKLARGKKDTIAGEKPTKDFAFASVADKDIKKGEL LSGDNLWVKRPGNGDFSVNEYETLFGKVAACNIRKGQAQIKKTDIE
9	0089	MNQTSRDLTRISHNTKIVATLPGSNNVLELDIMIRVGGNVVRFNFSHGTPEFHQENALIVREAAGRAGEIAII ADLQGPKIRVGKIAAGGIELNKGETLVIDAALEGEGETREAVGLDYRDLPPDVAAGDVLWLDGLLTLTVESEGR IIITRVENSHVLSNKGINKRGCGLSAGALTEKDFRDLKTAIAICCDYLAISFVKAEDLHIAKVEEEMKGSTAV RPGLVSKIERVEAIENDEIILAGDGMIVARGDLAVEVGHAAVPALQKRMIRRARELRRFSITATQMMESMITNPV PTRAEVSDVANAVLDGTDAMCSAETAVGAYPFETVSQMAIIICAAAEKEQDSLNGVAEQVYPEAVSTNLAVAGGA VSVARAVHAKAIALTESGSTAEISRNHITLPFALTPSVAQRRMAMYRGVRPLILATSTDHTALNEVETMLV EHNILHSGDQYIITSGSQMRQSGSTNTLEVLRVK
10	0109	MLKGTFITRHI PRGCRRFFQPNQARQTEIYQIRGTVMORRIITLLCAAGMAFSTOTLAANLEVRPNAPERYTVK

		QGDTLWGKISGKYLYSPWQWGRWDANRDQIHNPDLIYPDQVLVLRHVDGEPRLGLEQTDGIPVVKMSPDKEVSGYG IPAIDVNFYRIFMRHPQIVSRKETAAAPRLSGPEGRLYTGTGRVYTKGLKEPGRYLTYRINKNITDPDTGKFLG QEVAFSGIVRSLDYTDVLEQRSKQAGERPKDNEYHTRTHPLITPLRTPSIQPLVVAETAISEIQQGDYLMKMPEDT DRFNMMMPHEPSRPVQAKIVSVFEGTRIAGQFOTITIDKGEADGLKGTVLSLYKRKKTQVQLSNNFKSRDTVELI STPAEEVGGLAMVYRTSEHLSAIILENISDISVGDAAAPGRDLDNIPDQGRSRVKFGFNRE
11	0115	MRSSDILIVDDEIGIRDLLSEILQDEGYSVALAENAEEAERKLRHOARPAMVLLDIWMPDCDGITLLKEWAKNGQLN MPVVMMSGHASIDTAAVEATKIGAIDFLEKPISLQKLLSAVENALKYGAQATETGPVFDKLGNSAAIQEMNREVGAA VKCASPVLILTGEAGSPFETVARYFHKGNTPWSPARVEYLIDMPMELLQKAEGGVLVYGDIAQYSRNIQAGIAFIV GKAEEHRRVRRVVASGSRAAGSDGIACEEKLAELLSSESVVRIPLRMQHEDIPFLIQGIACNVAESQKIAPASFSEEA LAALTRYDWPGNFDQLOQSVVATLLLEADGQEIGAGAVSSLLGQNVPAEGAEDMVGGNFNLPLRELREVERRYFE YHIAQEQQNMSQVAQKVGLERTHLYRKLKQLGIGVSRAGEKTEA
12	0124	MAKEKFERSKPHVNNGTIGHVDHGTTLTAATTIILAKKFGGAAKAYDQIDNAPEEKARGITINTSHVEYETETRH YAHVDCPGHADYVKNMITGAAQMDGAILVCSAADGPMPQTREHILLARQVGVPYIIVFMNKCDMVDDAELLELLEM EIRDLLSSDFPGDDCPIVQGSALKALEGDAAYEKKIFELAAALDSYIPTPERAVDKPFLLIEDVFSISGRGTVV TGRVERGIIHVGDEIEIVGLKETQKTTCTGVEMFRKLLDEGQAGDNVGVLRLGKREDVERGQVLAKPGTITPHTK FKAEVYVLSKEEGRHTPFFANYRPQFYFRRTDVTGAVTLEEGVEMVMPGENVTITVELIAPIAAMEEGLRFAIREG GRTVGAGVVSIA
13	0126	MSKKWYVVQAYSGFEKNVQRILEERIAREEMGDYFGQILVPVEKVDIRNGRKTISERKSYPGYVLVEMEMTDDSW HLVKSTPRVSGFIGGRANRPTPISQREAEIILQQVQTGIEKPKPKVEFEVGQQVRVNEGPADFNGVVEEVNYERN KLRVSVQIFGRETPELEFSQVEKIN
14	0128	MAKVSKRALKRSSVEANKLYAIDEAIALVKAATAFKFEDSVDSFNLGVDPKSDQVIRGSVVLPKGTRVA VFTQGANAEAAKEAGADIVGFEDLAAEIKAGNLNFDDVVIASPDAMRIVGQLTILGPRGLMPNPKVGTVPNVAEA VKNAKAGQVQYRTDKAGIVHATIGRASFAEADLKENDALLDAIVKAKPAAKQYQLKKVAVSSTMGLGIRVDTSS VNN
15	0130	MSLNIEKKVAVEEISAAIANAQTLVVAEYRGISVSSMTELTRANARKEGVYRLVKNTLARRAVQGTSFAELADQM VGPLVYAASEDAVAAAKVLHQFAKKDDKIVVKAGSYNGEVMAAQVAAELASIPSREELLSKLLFVMQAPVSGFARG LAALAEKKAGEEEAA
16	0131	MAITKEDILEAVGSLTVMEFLNDLVKAFFEEKGVSAAAVAVAGPAGAGAADAEEKTEFDVVLASAGDQKVGVVKVR AITGLKEAKDIVDGAPKTIKEGVSKAEEADIQKQLEEAGAKVEIK
17	0132	MCMNSFTEKKRIRSKAFKRENVLVPFLLATQIDSYAKFLQLENAFDKRTDDGLQAAFNSIFPIVSHNGYARLEF VHYTLGEPLEDIPECQLRGITYAAPLRARIRLVLILDKEASKPTKEVRENEVYMGIEIPLMTPSGSFVINGTERIVV SQLHRSPGVFFEHDKGKTHSSGKLLFSARIIPYRGSWLDFDPKDLLYFRIDRRRKMPVTILLKALGYNNEQILD IFYDKETFYLSSNGVQTDLVADRLKGETAKVDILDKEGNVLVAKGKRITAKNIRDITNAGLTRLDVEPESSLGKAL AADLIDSETGEVFLASANDEITEELLAKFADINGVKEITTLINYEINELDQGAYISNTLRTDETAGRQAARVAIYRMMRPG EPPTEEAVEQFLNRLFFSEDSYDLSRVGRMKFNRTYEQKLSEAOQNSWYGRILLNETFAGAADKGGYVLSVEDIVA SIATLVELRNGHGEVDDIDHGNRRVRSVGETENQFRSGLARVERAKERLNAESENLMPHDLINAKPVSAAIK EFFGSSQLSQFMDQTNPLSEVTHKRRVSALGPGLTRERAGFEVRDVHPTHYGRVCPIETPEGPNIGLINSLSVYA RTNDYGFLETPYRRVIDGKVTIEIDYLSAIEEGRYVIAQANADLSDGNLIGLDTREKGETIMATPDRVOYMDV ATGQVVSVAASLIPFLEHDDANRALMGANMQRQAVPCLRPEKPMVGTGIERSVAVDSATAIVARRGGVVEYVDANR VVIRVHDEATAGEGVGVDIYNLVKFTRSNQSTNINQRPAVKAGDVLQRGDLVADGASTDFGELALGQNMIAFMPW NGNYNEDSILISEKVAADDRYTSIHIEELNVARDTKLGAEDITRDIPNLSERMQNRLDESGIVYIGAEVEAGDVL VGKVTPKGETQLTPEEKLLRAIFGKASDVKDTSLRMPTGMSGTVIDQVFTREGIQRDKRAQSIIIDSEIKRYRLD LNDQLRIFDNDAFDRIERMIVGQKANGPMLAKGEITTEYLAGLPSRHDWFDIRLTDDELAQLELIKVSLQK REEADELYEIKKKKLQGDELQPGVQKMKVVFIAIKRRLQAGDKMAGRHNKGVSRILPVEDMPYMADEGRPVDIV LNPLGVPSRMNIGQILEVHLGWAAGKIGERIDRMLKEQRKAGELREFLNRILYNGSGKKEDLDALTDEEIELASNL RKGASFASPVFDGAKESIREMLNAYPSDDPEVEKLGFDNSKTQITLYDGRSGEAFDRKVTVGVMHYLKLHHLVD EKMHRSTGPYSLVTQQPLGGKAQFGGQRFGEEMEVWALEAYGAAYTQEMLTVKSDDVNGRTKMYENIVKGEHKID AGMPESFNVLVKEIRSLGLDIDLERY
18	0133	MNLLNLNFNPLQTAGMEEEFDAIKIGIASPETIRWSYGEVKKPETINYRTFKPERDGLFCAKIFGPVKDYECLCGK YKRLKFKGVTCEKCGVETLSKVRERMGHIELAAPVAHIWFLKSLPSRLGMVLDMLTRDIERVLYFEAFVVTDPG MTPLQRQOLLTEDDYYNKLDEYGGDFDAKMGAEIRELLRTLNVAGEIEIILRQLEESTGSDTKIKKIAKRLKVLEA FHRSGMKLEWMIMDVLVLPVPLPDLRPLVPLDGGRFATSDLNDLYRVRINRNNRILKRLLELHAPDIIVRNEKRMQEA VDSLLDNGRRGKAMTGANKRPLKSLADMIGKGKGRFRQNLGGKRVVDYSGRSVITVGPYRLRHOCLPLKKMALELFK PFI FH KLEQGLASTVKAKKLVEQEVPEWDLLEEVIREHPIMLNRAPI TLHRLGIQAFEPILIEGKAIQLHPLVC AAFNADFDGDQMAHVPLSLEAQMEARTLMLASNNVLSPANGEPIIVPSQDIVLGLYLYMTRDRINAKGEGLFADV KEVHRAYHTKQVELGKTVLREWVNEAGEFEPVNRYETTVGRALLSEILPKGLPFYVNNKALKKKEISKLIN ASFRLCGLRDTVIFADHLMYTGFGFAAKGGISIAVDDMEIPKEKAALLAEANAEEVKEIEDQYRQGLVTNGERYNKV VDIWRGRAGDKIAKAMMDNLSKQKVIDRAGNEVDQESFNSIYMMADSGARGSAAQIKOLSGMRGLMAKPDGSIIEP ITSNFREGLTVLQYFIATHGARKGLADTALKTANSYLTTRRLVDVTQDLVVVEEDDCGTSDFGFMKAVVQGGDVIEA

		LRDRILGRVTASDVDPSSGETLVEAGTLLTEKLVDMIDQSGVDEVKVRTPITCKTRHGLCAHCYGRDLARGKLVN AGEAVGVIAQSIGEPGTQLTMRTFHIGGAASRAAAASQVEAKSNGTARFSSQMRYVANNKGELVVIGRSCEVVIH DDIGRERERHKVPGAILLVQDGMAIKAGOTLATWDPTHTRPMIETEHAGMVKFENVEEGVTVAQQTDDVTGLSTLVV IDGKRRSSSASKLRLPTVKLLDENGVEICIPGTSTPVSMAPVGAVITVREGQEIGKDVLAARIPOQASSKTRDITG GLPRVAELFEARVPKDAGMLAEITGTFSFGKETKGKQLIYTVDGVAYETLISKEKQILVHDGQVNRGETIVDG AVDPHDILRLQGIEALARYIVQEVEVYRLQGVKISDKHTEVIIIRQMLRRVNIAADAGETCFITGEQVERGDVMAAN EKALEEGKEPARYENVLLGITKASLSTDTSFISAASFQETTRVLTEAAIMGKQDELRLGLENVIGRLIPAGTGLTY HRSRHQQWQEVEQETAETQVTDE
19	0137	MPRRREVPKRVDLDPKFGSVELTKFMNVLMIDGKKSVAERIVYGALEQIEKKTGKVAIEVFNEAIANAKPIVEVK SRRVGGANYQVPVEVRPSRRLALAMRWRDAARKRGEKSMDRLLAGELIDASEGRGGALKKREEVHRMAEANKAFS HFRF
20	0138	MARKTPISLYRNIGISAHIDAGKTTTERILFYTGTLTHKLGEVHDGAATTDMYEQEQRGITITSAAVTSYWSGMA KQFPEHRFNIIDTPGHVDFTVEVERSMRVLDGAVMVYCAVGGVQPOSETVWRQANKYQVPLAFVNKMDRQGANFF RVVEQMKTRLRLANPVPIVIPVGAEDNFSGVVDLLKMKSIWIWNEVDKGTTFTYGDIPAEVETAEWRQNMIEAAAE ASEELMDKYLGGDELTEEEIVGALRQRTLAGEIQPMLCGSAFKNKGVQRMLDAVVELLPAFTDIPPVQGVNPNTEE ADSRQASDEEKFSALAFKMLNDKYVGQLTFIRVYSGVVKSGDTVLNSVKGTRERIGRLVQMTAADRTEIEVRAVD IAAAIGLKDVTITGETLCAESAPIILERMEFPEPVVIHIAVEPKTADQEKMGIAALNRLAKEDPSFRVRTDEESGQT ISGMGELHLEIIVDRMKREFGVNEANIGAPQVAYRETIRKAVKAECYKAKQSGGKGQYGHVVIEMEPMEPGGEYEF IDEIKGGVIIPREFIPSVDPKGIRDTLPGIVAGYPVVDVRIRLVEFGSYHDVDSQLAFELAASQAFKEGMRQASPAL LEPIMAVEVETPEEYMGDVMGDLNRGRRVVLGMDDDGIGGKKVRAEVPLAEMFGYSTDLRSATQGRATYSMEFKKY SEAPAHIAAAVTEARKG
21	0140	MANQKIRIRLKAYDYLIDRSAQEIVETAKRTGAVVKGPIPLPTKIERFNILRSPHVNKSREQLEIRTHLRLMDI VDWTDKTTDALKLMDLPAGVDVIEKVQ
22	0142	MTLGLVGRKVGMTRVFDEQGVSPVTVLDMSANRVTQVKSKDGTGTYAVQVTFQOKKANRVNKAEGHFAKAGVEA GRGLIEFALTEEKLAELKAGDEITVSMFEVGQLVDVTGTSKGKGSQIIRHNFQAQRTSHGNSRSHRVPGSIGMA QDPGRVFPGKRMAGQYGNKTATVQKLEVVRVDAERQLLLVKGAVPGAVNSDVRPSPKVGA
23	0143	MELKVIDAKGQVSGSLSVSDALFAREYNEALVHQLVNAYLANARSGNRQKTRAEVKHSTKKPWRQGTGRARSGM TSSPLWRKGGRAPNPKDENFTQKVNRMYRAGMATILSQLTRDERLFAIEALTAETPKTKVFAEQVKNLGLEQVL FVTQOLDENVYLASRNLPNVLVEAQVDPYSLRYKKVIITKDAVAQLEEQWV
24	0144	MNQQLTQVILAPIVSEKSNVLAEKRNQMTFKVLANATKPEIKAABELLFGVQADVTTVTIKGKVRFGRTLGRR SDVKKAYVSLAAGQELDLEAAAAAADKE
25	0154	MARLREFYKETVVPPELVQKQFGYKSVMEVPRIEKITLNMGVGEAVADKKVMEHAVSDLKIAQKPVVTVARKSIAG FKIRDNPVGCKVPLRRDQMFEFLDRLLITIALPRVRDFRGVSGKSFDRGRGNYNMGVREQIIFPEIEYDKIDALRGL NITITTTAKTDEEAKALLSLFKPFPKG
26	0156	MSMHDPISDMLTRIRNAQRANKAAVAMPSSKLKCAIAKVLKEEGYIEDFAVSSDVKSILEIQLKYYAGRIVIEQIK RVSRPGLRIYKASSEIPSVMNGLGIAIVSTSKGVMTDRKARSQVGGEELLCA
27	0157	MSRVAKNPVTPAGVEVKFGAEALVIKGKNGELSPFLHSVAIEFNDGKLTFTVANNSSKQANAMSGTARALVSNMV KGVSEGFEKRLQLIGVGYRAQAQGKILNLSLGFSPHIVYEMPEGVSVQTPSQTETIVLTGSDKQVVGQVAEIRAFR APEPYKGKGVRYVGEVVMMKEAKKK
28	0159	MAKHEIEERDGGLIEKVMAVNRVTKVVKGRIMAFSALTUVGDGDRIGMGKGSKEVVPVAVQKAMDQARRSMIKV PLKNGTIHHEVIGRHGATKVFQMOPAKEGSGVKAGGPMLVFDAMGIHNISAKVHGSTNPYNIVRATLDGLSKLHTP ADIAAKRGLTVEDILGVNHG
29	0168	MQNSTTEFLKPRQIDVNTFSATRAKVSQMPFERGFQHTLGNALRLLSSMNGFAPTEVAIAGVLHEYSTVDGIQE DVVDILLNIKGIVFKLHGRSQVQLVKKSGSGVVSAGDIELPHDVEILNPGHVICHLADNGQIEMEIKVEQGRGYQ SVSGRQVVRDENRQIGAIQDASFSPISRVSEVEPARVEQRTLDDKLVLDIETDGSIDPEAVRSAARILIDQMS IFADLQGTPVEEVEEKAPPIDPVLRLPVDDLELTVRSANCLKAEDIYYIGDLIQTETELKTPNLGRKSLNEIKE VЛАSKGLTGSKLEAWPPVGLEKP
30	0171	MAKIIIVVTSGKGGVGKTTTSASIAITGLALRGYKTAVIDFDVGLRNLDLIMGCERRVYDILINVQGEATLNQALIK DKNCENLFLIPASQTRDKDALTRREGVEKVMQELSGKMGFEYIICDSPAGIEQGALMAYFADEAIVTTNPEVSSV RDSDRILGILQSKSHKAEQGGSVKEHLLITRYSPEVAKGEMLSVQDICDILHIPLLGVIPESQNVLQASNSGEPV IHQDSVAASEAYKDVIAIRLLGENREMRFLEAEKKSSFFKRLFGG
31	0173	MTLTELRYIVAVAQERHFGRAARRCFVSOPTLSIAIKKLEELAISLFDRSSNDIITTEAGERIVAQARKVLEEA LIRHLANEEQNELEGAFKLGIFTVAPYLLPKLIVSLRRTAPKMLPLMEEVYHTLTESLKGVDVDAIIVAEPFQE PGIVTEPLYDEPFFVIVPKGHSFEELDAVSPRMLGEEQVLLTEGNCMRDQVLSSCSELAKQRIQGLTNTLQGSS INTIRHMVASGLAISVLPALTENDHMLFSIIPFEGTPPSRRVVLAYRRNFRPKALSAMKAAMQSQLHGVFSI CD
32	0193	MTHMIYPKTYDVIVVGGHAGTEAALAAARMGAQTLLLSHNIETLGQMSCNPSIGGIGKGHLVRELDALGGAMALA

		TDKSGIQFRRNLNASKGAAVRAVRAQADRILYKAAIREMLENQENLDLFOQAVEDVTLGERISGVITAMGVFKA AVVLTAGTFLSGKIHIGLENYEGGRAGDPAAKSLGGRLRELKLPQGRLKGTGPPRIDGRTIDFSQLTEQPGDTPV VMSVRGNADMHPRQVSCWITHNTQTHDIIRSGFDRSPMFTGKIEGVGPRYCPSTEDKINRFADKDSHQIIFLEPEG LTTHEYYPNGISTSLPFDIQIALVRSMKLENAAHILRPGYAEYDYFDPRNLKASLETKTIAGLFFAGQINGTTGY EEAAAQGQLLAGANAVQYVRGQDPLLLRREQAYLGLVVDLLITKGVNPEYRMTSRAEYRLQLREDNADMRLTEDGY KIGLVSEAQWRMFNEKREAVEREIQLKTTWYTPQKLAEGEIQIRVFGQKLSREANLHDLRRPNLDYAAALMTLEGA MPSENLSAEEVIEQVEIQVKYQGYIDRQNEEIDSRRDIETLKLPGIDYGVKGGLSAEVQQLNQHKPETVGQASRI SGVTPAAVALLMVHLKRGFKDAK
33	0196	MKRMLFNATQAEELRVAIVDQONLLLDIETLGKEQRKGNIYKGIIITRIEPSLEACFVYDGTDRHGFPLFKEVSR YFQDYEGGRARIQDVLEKGMEVIVQVEKDERGNKGAAALTTFISLAGRYLVLMPNNPRGGVSRRIEGEERQELKAA MAELDIPNGMSIIARTAGIERSAEELEWDLNLYKOLWQAAIEEAGKAHHDPYLLFMESSLLIRAIRDYFRPDIGEIL VDNQEVDQVAEFSYVMPGNIGRLKLYEDHTPLFSRFQIEHQIESAFSRVSLSGGAVIDHTEALVSIDVNSA RATRGADIEDTAFKTNMEAEEVARQMRRLDGLLVIIDFIDMENPKHQRDVENVLRAKDRARVQMGKLSRFG LLELSRQLKPALGESSHVACPRCACTGVIRGDESTALHVRIIQQEAMKDNTGEVRAQPVDVATFLNEKRAEL FAMEERLDVNVLIPNIHENLPHYEINRIRTDVEEDGEPSYKRVAEPEEDESAKPFGEKAKAARPEPAPKGVRH TSPAPTAPEKKTSWWDSSKAWLKRIFGGSETQAAPEAETSEKRSTANRSGSRANNRQNPRRSKREGSKVREV AGKTAGQEARADKAETRNNGNRRRNERDRAERANEAEIQSRNVQPAATVADAAPSETEVQTKRERRNGRSRERG QTAPETATVAAETTVQTAENTPSEPTAEDKGSKPKSERNRERDSRDAKERRERNNQRDRONGKKRNIPSAKIE QYLNIDTADKVRSAAAHVFGETDANAPITVSIADPVAERDLPTASPAVNSGADAPVYDAEKIRRATAAILPEGAT PKAEAQEMPSETATFTAAEQARETAQTLGLVLIETDPAALKAWAAQPEVQAGRGLRSEQPKPSEVATVPAEEMI QVETROG
34	0212	MTEQKHEEYGADSIQVLEGLEAVRKRPGMYIGDTQDGSLHHMVFEVLDNAIDEALAGHCDKITVTIADHSVSA DNGRGMPTGIHPKEGRSAAEVIMTVLHAGGKFDDNSYKISGGLHAGVGVSVNNALSDWVTLTIYRDGKEHFVRFVRG ETEEPLKIVGDSDKKGTVRFLASTETFGNVVEYNSFDILAKRIELSFLNNGVDIETDERDGKHESFALSGGVAGF VQYMNRKTKPLHEKIYAFGEKGMSVCECAMQWNSYQESVQCFNNIPQRDGGTHLTALRQVMTRTINNNYEANE VAKKAKVETAGDMREGLTCVLSVLPDPKFSSQTKDKLVSGEIGPVVNEVISQALTDFFLEENPNEAKIITGKIVD AARAREARKAREITRKGVMGDLGLPGKLADCOEKDPALSELYLVEGDSAGGSAMQGRDRKFQAILPLKGKILNV EKARFEKMLASQEVALTITALGAGIGKEEFAEKLRYHRIIIMTDADVDGAHIRTLLTFYRQMPPELVERGYIYI AQPPLYKAKYKGQERYLKDELEKDQWLGLALEKAKIISDGRGTTIEGAELADTAQFLLAKTVIEQESRFVDELVLR AMLHASPIDLTSSENADKAVAELSGLLDEKEVALERIEGHEGHRFIKITRKLHGNVMVSYIEPKFLNSKAYQTLQ TAAALKGMVGEAKLYKGENGYDADSFTALDILMSVAQKGMSIQRYKGLGEMNPQLWETTMDPAVRLLKVRIE DATAADEVFVTLMGDEVEPRRAFIENNALIAQNIDA
35	0219	MSQRRVVITGLGQSPVGNTVAEAWDTLLTGKGIGAITRFDTSIDNSRVAEGVRGFDIGQYISAKEARRMDVFIH YGIAAALQIAIDSGLDDVENLDKDRIGVNIGSGIGGLPGIEVTGKAVIEGGARKINPFFIPGSLINLISHGHTILK GYRGPSYGMVSACTGGAHAIGDSLRMICKYGDADIMVAGGAEGAISTLGVGGFAAMKALSTRNDDPATARPWDKGR DGFVIGEGAGIILVLEELAHAKKRGAKIYAEIVFGMSSDAYHITAPNEEGPALAVTRALKDAGINPEDVDYVNAHG TSTPLGDASETKALKKRAFGEHAYKTVVSSSTSMTGHLGAAGGVEAVYSLAIHDGKIPPTINIFEQDVEAGCDLD YCANEARDAEIDVAISNSFGFGGNTLUVFKRFKG
36	0246	MAIYQSGVIFDQVDTANPDCWTLDLEYVKRGGYTALRKILSENISQTDVIDEVKTSGLRGRGGAGFPTGLKWSFMPR SFPGEKYVVCNTDEGEPEGTFKDRDIIMFNPHALIEGMIIAGYAMGAKAGYNYIHGEIFEGYQRFEAALEQARAAGF LGKNILGSDFEFELFAHHGTYGAYTCGETALLESLEGKKQPRFKPPFPASFGGLYKPTTINNTETFSSVFPFIIRD GGQAFADKGIPNAGCTKLFCTISGHVERPGNYEVPLGTPFAEVLKMAAGMGRGGKKLAKVIPGGSSAPVLPADIMMQT NMDYDSISKAGSMILGSGAIIVMDEDVCMVKALERLSFYDESCQCTPCREGTCWLYRIVHRIVEKGKMGEDLDD LDSVGNQMGRTICALADAAVFPVRSFTKHFREDFVHYIEHGGPMKEHKWGG
37	0286	MNFTRLLNQVLSTVQKKGNTFSDSPPLNSFGGGALVAGVASMLLNGKNRKTITKIGSTAALGYLAYRGYQMWQQNKG RATVTQSDFQPAGETEETYSTRVLRTMIAAAASDGMIDEAERRTIQEESGTDPETAAWLAAYRLPASIEDIAAAV GNDEALAAEAYLAARLVCADLSRKETVFLARLSQLAKLDDNLVESLEROLQF
38	0294	MKLKTLALTSLLALAAACSKQAETSPVADSAQSSSSAPAAPAELENEGVNVTVLSTPIPOQQAGKIEVLEFFGYFC PHCAHLEPVLSHEIKTFKDDTYMRREHVVWGDEMPLARLAAAVEMAGESDKANSHIFDAMVNQKINLADTDTLKK WLSEQTAFDGKKVLAFAEAPESQARAQMEELTNKFQISGTPTVIVGGKYQVEFKDWQSGMTTIDQLVDVKREEQK KPO
39	0329	MSVGLLRLILVQNQVVTVEQAEHYNESQAGKEVLPMLFSDGVISPKSLAALIARVFSYSILDRLHYPRHRVLMGV TEEQMVEFHCPVFRRGDKVFFAVSDPTQMPQIQTVCASAAGIEVELVIVEDDQLAGLLDWWGRSTSLSLQELGEGQ EEEESHTLYIDNEEAEDGPVPRFIHKTLSDALRSGASDIHFIFYEHNARIRFRVDGQLREVQPPIAVRGQLASRI KVMRSRLDISEKRPQDGRMQLTFQKGKPVDFRVLSTPLTFLGEKVVMRILNSDAASLNIDQLGFEFPQKLLLEAI HRPYGMVLTVTGTGSGKTVSLYTCILNNTESVNIATAEDPAEINLPGINQVNVDQGLTFAAALKSFLRQDPDI IMVGEITRDLTADIAIKAAQTGHMFSTLHTNNAPATLSRMLNMGVAPFNIASSVSLIMAQRLRLRCSSCKQEVE RPSASALKEVGFDEDLAKDWKLYRAVGCDRCRGQGYKGRAGVYEVMPISEEMQRVIMNNGTEVDILDVAYKEGMV DLRRAGILKVMQGITSLEEVTANTND

40	0335	MSLQNIIEFENRADIPTTVTPEVKEAVLETIQLDSGKLRVAERLGVGEWKVNEWAKKAVLLSFRIQDNEVLN DCVNKYFDKPTKFADWSEDEFKNAGFRAVPGAVARRGSFVAKNNVLMPSYVNIGAYDEGAMVDTWATVGSCAQI GKNVHLSGGVGIGGVLEPLQAAPTIIEDNCFIGARSEIVEGVIVEEGSVISMGFIGQSTKIFDRTTGEIYQGRVP AGSVVSGSMSKDGSHSILYCAVIVKRVDAQTRAKTSVNELLRG
41	0336	MGFLQGKKILITGMISERSIAYGIKACREQGAELAFTYVVDKLEERVRKMAAELDSELVFRCDVASDDEINQVFA DLGKHWDGLDGLVHSIGFAPKEALSGDFLDSISREAFNTAHEIISAYSLPALAKAARPMMRNSAIVALSYLGAVR AIPNYNVGMGAKASLEAGIRFTAACLGKEGIRCNGISAGPIKTLAASGIADFGKLLGHVAHNPLRRNVTIEEVGN TAAFLSDLSSGITGEITYVDGGYSINALSTEG
42	0337	MSRPVPAVFGSVFHQSMPVLAYREGKWOPTEWQSSQDLSLAPGAHALHYGSECFEGLKAFRQADGKIVLFRPTANI ARMRQSAIDLHLRPPETEAYLDALIKLVRKRAADEIPDAPAALYLRTPLIGTDPVIGKAGSPSETALLYILASPVGD YFKVGPVKILVETEHIRCAPHMGRVKCGGNYASAMHWVLKAKAEGYANQVLCPCNGDVQETGASNFILEINGDEII TKPLTDEFLHGVTRDSDLVTLAKDLYTVSERNFTVDELKAAVENGAEAILTGTAAVISPVTSFVIGGKEIEVKSQE RGYAIRKAITTDIYQGLAEDKYGWLVEVC
43	0351	MTILSDVKALGQQIWLDNLRSRSLVQSGELAQMLKQGVCGVTSNPAIFQKAFAGDALYADEIAALKQQNLSPKQRYE TMAVADVRAACDVCLAEHESTGGKTGFSLEVSPESLKDQAGTVEEARRLYAAIGCKNAMIKVPATDAGIDALETL VSDGISVNLTLLFSRAQTILKAYAAYARGIAKRLAAGOSVAHIQVVASFFISRVGALDTLDPDHLKGKIAALAKA AYQDWAQYFGSPEFAALETKGANRVQLLWASTGVKNPAYPDTLYVDSLIGAHTVNTVPDATLKAFTDHGTAKATLT EGVEEAQAQLAETAALGIDVETLATRLOEDGLKQFEEAFKLLAPLA
44	0359	MSIKNAVKLIEESEARFVDLRFTDTKGKQHHFTVPARIVLEDPEEWFENGQAFDGSSIGGWKGIQASDMQLRPDAS TAFVDPFYDDATVLTCDVIDPADGQGYDRDPRSIIARRAEAYLKSSGIGETAYFGPEPEFFVFDGIEFETDMHKTR YEITSESGAWASGLHMDGQNTGHRPTVKGGYAPVAPIDCGQDLRSAMVNILEELGIEVEVHSEVGTGSQMEIGTR FATLVKRADQTTQDMKYVIQNVAHNFGKTATFMPKPIMGDNGSGMHVHQSIWKGQNLFLAGDGYAGLSDTALYYIGG IIKHAKALNAITNPSTNSYKRLVPHFEAPTKLAYSAKNRSASIRIPSVDNNSKARRIEARFPDPTANPYLAFALLM AGLDGICQNKIHPGDPADKNLYDLPPEEADLVPTVCASLEELAALKADHEFLRGGVFSKDWDTSYIAFKEEDVRR IRMAPHPLEFEMYSL
45	0382	MTKQLKLSALFVALLASGTAVAGEASVQGYTVSGQSNIEVRNNYGECKNAYFDKASQGRVECGDAVAAPEPEPEP EPAPAPVVVVEQAPQYVDETISLSAKTILFGFDKDSLRAEAQDNLKVLQRLSRTNVQSVRVEGHTDFMGSDKYNQA LSERRAYVANNLVNSNGVPVSRISAVGLGESQAQMTQVCEAEVAKLGAKVSKAKKREALIACIEPDRRVDVKIRSI VTRQVVPahnHHQH
46	0390	MYTRIMEISPWTLSRAKLEKEHKRLQESLTSLGNGYMGMRGSFEETYSADSHLGYIAGVWFPDKTRGVWWKNGYP KYFGKAINAFNSKVKIIVDQEVDLAKNDVAGFSVELDMQHGVLLRSFTVFGVRFNCKFLSVAQKELAVIRWEA VSVDGKTHQVRIDSIIADAVKNEDSNYEKFWQVLDKGVSDSLSYIAAQTVANPFGVEQFIVNAEQTFAGSFKALG GSQTDWQVSNSFSEVGSTPETFEKRVIVTTSRDYQSLAEVKAAGRALSEKIAVGAFETLLDAHKAGWLHWEIAD VVIEGSDEAQQGIRFNLFQLFSTYYGEDARLNIGPKGFTGEKYGGATYDTEAYAVPLYLALAEPEVTRNLLQYRR NQLPQAQHNAREQGLAGALYPMVFTGIECHNEWETFEIIRNGAIPIYAIYNTNTGDEGYLAKEGLEVLVEVS RFWADRHFVFSKRNGKYMIGHVTPNEYENNINNNWYTNTLAAWVLDYTREALAKYPRPDLNVRADELEKWAIDIAN MYRPHDEELGVFVQHDGFIDKDIRPVSAISPDPLNQKWSWDKILRSPFQADVLQGIYFFSDRFNIDEKRRNF DFYEPMTVHESLSPCIHSILAAELGEEKAVEEMYQRTARLDDNLYNNDTEDGLHITSMTGSWLAIVQGFAQMKTW GGKLSFAPFLPSAWTGYAFHINYRGRLIKVAVGKENVFTLLKGESLDLQVYQKDITLDGSHTVALEK
47	0391	MTFTAVLFLDGVITDTAEHYRAWKLAELGISIDRKFNEQLKGVSRRDDSLKRLAHGGKTVSEAEFAELTRRK NDNYVEMIQAQVPEDVYVPGILPLLEALRANGKKIALASASKNGPFLLERMGLTHFFDAIADPAAVHSKAPDIFL AAAEGVDADIQCIGIEDAAAGVAAIAKAGALPIVGKAEDLGSIALVSGTAELTYAYLQSVWEQSGR
48	0426	MEQQQRYISVLDIGTSKVLALIGEVQDDDKINIVGLGQAPSRGLRAGMVTNDATVQAIROAVNDAELMADTKITH VTTGIAGNHIRSLNSQGVVKIKDGEVTQADIDRAIETAKAINIPPDQKILDAAVQDYYIDTQLGVREPIGMSGVRL DTRVHITCASTAVQNVQKCIERCGLKSQDQIMLQPLASQAVLTDEKDLGVCVIDIGGGTTDIAVYMNGAIRHTS VIPAGGNLITKDLSSLRTPLDAAEYIKIHYGVASCDEGLGEMIEVPGVGDRTSRQVSSKVLAAIISARIQEIFG VVLGELQKSGFPKEVNLAGIVLTGGVSMMTGIVEFAEKIFDLPVRTGAPQEMGGLSDRVRTPRFSTAIGLLHAACK LEGNLQPENGAVQEREQGGGLLARLKRWIENSF
49	0427	MEFYDVAESAVSPAVIKVIGLGGGCNAINNMVANNVRGVEFISANTDAQSLAKNHAAKRIQLGTLRGLGAGA NPDIGRAAAQEDREAAIEEAIORGANMLFITTGMGGGTGTSAPVVAEIAKSLGILTVAVVTRPFAYEGKRVHVAQAG LEQLKEHVDLSIIIPNDKLMALGEDVTMREAFAADNVLRAVAGISEVVTCPSEIINLDFAVDVKTMSNRGIAM MGSGYAQGIDRARMATDQAISPLLDDVTLGARGVLVNITAPGCLKMSELSEVMKIVNQSAHPDLECKFGAAED ETMSEDAIRITIILATGLKEKGAVDFVAPREVEAVAPSKQEWSHNEGMIRTNRGIRTMLTAADFDNQSVLDDFEI PAILRRQHNSDK
50	0446	MSQTIDELLLPHRNAIDTIDAEIIRLLNERAQHAAHAIQELKGTGAVYRPEREVAVLRRIQDNLKGPLPDESVARLF REVMSECLAVERPLTIAYLGPQGTFTQQAIAKHFQHAAHTMACPTIDDCFQVETRQADYLVAPVENSTEGSVGRT LDLIALVTALQACGEIVLRIHHNLLRKNGSTEGIAKVFSHAQALACNDWLGRHLPNAERIAVSSNAEARLVAES DDGTVAAIAGRRAAEIYGLDMVAECIEDEPNNTTRFLVMGHETGASGSDKTSLAVSAPNAGAVASLLQPLTESG

		ISMTKFESRPSKSVLWEYIFFFIDIEGHRRDAQIQTALERLGERASFVKVIGSYPTAVL
51	0462	MQAFSLYPPVGHGPDSAKKRQNRAVDVFLPFWKQDNFLGKSVQYRFQFAQIYFTMPKPCAGVTMGRGDFFFSNSLNFHQESARMKKSVLAVLAALSLAACGGSEKNAVQPOADAASAANAEAAATDTLNINWSNYVDESTVEDFKKANNLKLTYDLYENNETLEAKMLTGKSGYDLVPGIAFLPRQIEAGAYQKVNKDLIPNYKNIDPELLKMLETADPGNQYAVPYFSGVNTIAITAKGKELLGGKLPEGWDLFKPEYTHKLKSCGIALWDTPSEMFPILLNLYLGKDPKGSNPEDLKAEEVLKSIRPDVKRFSPSIIDELARGDICLAAANGGDLNLAKARSEEVKNNVGIEVLTPKGFMGFIESWLIPADAKNVANAHKYINYTLDPEIAAKNGIAVTFAPASKPAREKMPAELVNTRSIFPNEQDMKDGFMVMPQMSTDAKKLSVSLWQKIKVGTN
52	0466	MRTNYCGLISEQYLDQTVKGVWVHRRDHGGVIFIDLRDREGIVQVVIDPDTPEAFAAADSSRNEYVLSITGRVRNRPEGTTNDKMISGKIEIILAKEIEVLNAATPPFQIDDENISEVRLTNRVIDLRRPVMQRNLRLRYQVAMGVRRYLDAGQFIDIETPMLTRSTPEGARDYLVPSRVHPGEFFALPQSPQLFQOLMVAQFDRYYQITKCFRDEDILRADRQP EFTQIDLETSFLNEDEIMDITEGMAKQVFKDALNVLGDFPRMPYSEAMFYGGSDKPMRINLKFTELTDLMKTEEFKVFRGAADMKGGRVVALRVNGAEOFSRKEIDETYKFGVYIYGAKGLAYIKVNDVSNLSNGEDSGLQSPIVKYLSEN ALKEIARTGAQNGDIIFFGADAKAKVNEAIGALRIKVGLEHKGKDNGYFTDEWKPLWVVDFFPMFEYDEEADRYVAVHHPPFTAPKEGHEDLMVSDPANCLARAYDMVLNGWEIGGGSIRIHRADVQEKFVAALKISPEEQQEKGFLLDNLKF GAPPHGLAFLDRLVTLMTGAESIRDVIAFPKTQRAQCLLTNAPNSVDDKQLRESLRLRQKATEKEV
53	0477	MRENKIIFTGPVGVGKTTAAIASDEALVQTDASASDMTLDRKRNTTVAMDYGAISLDEDTKVHLYGTPGQERFNF MWEILSQGSMGLVLLDNARTNPKLDEFFLHSFRGLLEKAPVVVGITKMDIRSQPGIDVYHKLAKHNLNVPVFEIDARKEDDVQQLVSAMLFSIDPGLEV
54	0530	MTVPHIPRGPVMDIAAFRLTEEEKQRLLDPAVGGIILFRRNFONIEQLKLTAEIKALRTPELIIAVDHEGGRVQRFIEGFTRLPAMSTLGEIWDKDAGASAETAAGQVGRVLATELSACGIDLSFTPVLDDLGNCVIGNRSFRNPEAVARLALALQKGLTKGGMKSCGKHFPGHGFGVEGDSHLVLPEDWRSLSLELETADILAPFRIMSGMAAVMPAHVVYPOVDTPAGFSEIWLQIILRDRDGFKGVI FSDDLTMEGACGAGGIKERARISFEAGCDIVLVCNRPDVLDELREDFIPDNPTLAQRWQYMANTLGSAAAQAVMQTADFQAAQAFVAGLSPQDTAGGVKVGEAF
55	0540	MFFKHIEAAPADPILGLGEAFKAETRPEKVNGLGIVYKDASGATPLVKAVKEAKRLLSETTKNYLTIDGVADYN AQTQILLFGKDHEIIASRAKTAQSLGGTGALRIAEEFAKQRLNAQTIWISNPTWPNHNAIAKAVGIQDKPYRYDAAKHGLWDGMIEDLSQAKQGDIVLLHGCCHNPTGIDPTEQWETLAKLSAEKGWLPLFDFAVQGFGNGLEEDAYGLRVFLKHNTTELIASSYSKNGMYNERVGAFTLVAEDEETAARAHQSQVKTIIRTLYSNPASHGANTIALVLKNDDLKAQWIAELDEMRGRIKAMRQKFVGLLAKAGASQNFDFIIKQNGMFSFSGLTPQVDRLKNEFAIYAVRSGRINVAGITDNNIDYLCESESIVKVL
56	0546	MKMQAVVVNVNVNAGDVEIREEVRLPELEYGEALVEVEYCGVCHDLHVAAGDYGEKPGRVLGHEGIGLKVADGVKVNKGDRVSIAWLFQSCGSCYEYNTGRETLCRSVLNAGYTADGGMATHCIVSADYAVKVPGLDPAQASSITCAGVTTYKAIVKVGVRPGQWIAIYGAGGLGNLGVQYAKKVFGAHVAIDINDDKLAFAKETGADLVVNAAKEDAAKVIQEKTGGAAHAAVTVASAAFNSAVCVRAGGRVVAIGLPPESMDLSIPLVLDGIEVVGSLSVGRKDLEEAFQFGAEGLVVPKVQLRALDEAPAIFQEMREGKITGRMVIDMKKECCGGHHH
57	0564	MEIILGIVMFIVLVLALMILFAKSKLVSEGEDITKVNGEKELTMPAGGKLLGALANEGLFIPSACGGGSCGQCRRVVKSGGGDILPTELSHISKREAREGCRSLSCQNVKTMDIEVPEEVFGVKKWECTVISNDNKATFIKELKLAIP EGEEVPFraggyIQIEAPPHTVAYKDFDIPKEYHEDWDKYNLWQYVSKDEPILRAYSMASYPEEKGIIMLNVRATPPPPRVPDAPPQOMSSYIWSLKPQGDKVITSGPGEFFAKDRAFTDAEMVFIGGGAGMAPMRSHIFDQLKRLNSKRKITFWYGARSKREMFYVEDFDQLAEEFPNFTWHVALSDPLPEDNWGDYTGFIHNVYENHLKNHEAPEDCEFYMCGPPIMNQSVIKMLKDLGVEDENILLDDFGG
58	0589	MNLIQQLEQEEIARLNKEIPEFAPGDTVVSVRVEGTRSRLQAYEGVVIARRNRGLNSNFIVRKISSGEGVERTFOLYSPTEKEIYVKKRGDVRRAKLYYLRLGLTGKAARIKEKL PARKG
59	0595	MSRVLLVDDALLTELLTEYLSAEGLNRSPVDPGEAGVQEILSGQYDVVLDMSMMPKMNGLDVLKNVRARSTVPII MLTAKGDDIDRIIGLEMGADDYVPKPCTPRELLARINAILRRAQHSGEQNNAPNSISVSDVLYPAKROQAVKDMPELTSTEFNLEVLMRHAQVVSKEITSVEALDRKLAKFDRSIDVHISIRHKLGDASLIQTVRGLGYLFVKN
60	0604	MKAARFYDKDIRIEDIPEPTVAPGTVGINVACGICGTDLHEFMEGPIFIIPPCGHPHPISGESAPVTMGEFSGVVAVGEGVDDIKVGQHVVVEPYIIRDDVPTGEGSNSYHLSKDMNFIQLGGCGGGLSEKIAVKKRWWHPISDKIPLDQAALEPLSVGHAYVRSGAKEGDFVALVGGAGPIGLLLAAVLKAKGKIVIITELSKARKDKARESGVADYIILPSEVDVVAEVKKLTNGEGVDVAFFECTSVNKVLDTLVEACKPAANLVIWSHPATINVHSVVMKELDVRGTIAYCNDHAETIKLVEEGKINLEPFTQRIKDELVSKGFERLIHNNEAVKIIIVSPNL
61	0610	MLPVRFTRVSDGIKRLTPASNQTAFYHPFENPFCRYSSFYWSIAIMTATTASSAKPYLKIQGLVKKFGDNAYAVDNI DLDIYQHEIYALLGSSGGKSTLLRMIAGMESPNQGKIIIDGQDITKLAPYDRPINMMFQSYALFPHMTVEQNIAFGLKQDKMPKGEIAARVEEMLRVQMTKFAKRKPHQLSGGQQQRIALARSLAKRPKILLDEPLGALDKKLRRQQTQELVNNTLEQVGVTICMVTHDQEEAMTMTRIAIMSMDGQLQQVGTSPSDVYDYPNSRFTAEGTENIFDGVVIEDHADYAVIECEGLENHVRIDHGLGGPSEQDILWVSRPEDIDLYKEKPEYLGVDYNWAKGTVKETAYLGSFAIYHIKLGNGRVVKSQVPAPYVYVRNITPPWDETYIISWPENQPTPLFR

62	0617	MHVSELQTLHISKLLELAEEHGIENANRFRKQDLVFAIVRQMMKKGEGFTCSGLEILPDGFGLRSADTSYLAGPDDIYVSPQTIRRFNLHTGDTIEGSVRVPKDNERYFALVRLDTINGDHPEVCRHKILFENLTPLFPTEQLKLERDLKSEENLTGRAIDLISPIKGQRLVAPPKGKTVMLQNTIAHVTANYPEVELIVLLIDERPEEVTEMSRSVRGEVVSSTFDEPAQRHVQVAEMVLEAKRMVEHKKDVVILLDSITRLARAYNTVPTSGKILTGGVDANALHRPKRFFGAARNVEEGSLTIIATALVETGSRMDDVYEEFKGTGNMELHLDRRMAEKRFLFPAININKSGTRREELLVPNDQLQRMWLLRKFLHPEMDEIEAAEFLIGKIKASKNNDDFFELMRGK
63	0618	MADNYVIWFENLRMTDVERVGGKNASILGEMISQLTEKGVVPGGFATTAEAYRAFLAHNGLSERISAALAKLDVEDVAELARVGKEIROWILDTPFPEQLDAEIEAAWNKMDAGGADISAVVRSSATAEDLPDASFAGQQETFLNINGLDNVKEAMHHVFASLYNDRAISYRVHKGFEHDIVALSGAVQRMVRSDSGASGVMTLTDTESGYDQVVFTSSYGLGENVVQGAVNPDEFYVFKP TLKAGKPAILRKTMGSKHMKMFTDKAEAGKSVTNDVPEEDRNRF SITDEEITELAHYALTIEKHGRPM DIEWGRDGLDGKLYILOQARPETVKSQEEGNRNLRRFAINGDKTVLCEGRAIGQKVQGKVRLIKDASEMDSVEAGDVLVTDMTPDWEPMK RASAIVTNRGGRTCHAIIARELGI PAVVGCNATELLKNGQEVTVSCAEGDTGFIYAGL LDVQITDVALDNMPKAPVKVMMNVGNPELAFSFA NL PSEGIGLARMEFIINRQIGIHPKALLEFDKQDDDELKAEITRRIAGYASPVDFYVDKIAEGVATLAASVYPRKTIVRMSDFKSN EYANLVGGNVYEPHEENPMLGRGAARYVADNFKDCFALECKALKRVRDEMGLTNV EIMIPFVRTLGEAEAVVKA KENGLE RGKNGLRLIMMCELPSNAV LAEQLQYFDGFSIGNSNDMTQLTLGLDRD SGLVSES FDERNPAVKVMLHIAISACRKQNKYVGICQGQPSDHDFAKWLVEEGIESVSLNPDTVIETWLYLANELNK
64	0623	MKKTLVAAIILSALTACGGGSDTAAQTPSAKPEAEQSGKLN IYNWSDYVDPETVAAFEKETGIKTRSDYYDSNETLEAKVLTGKSGYDLTAPSIANVRQIKAGAYQKIDKAQI PHYGNIDKDLKMMEA VDPGNEYAVPYFWGINTLAINTQQVKKALGTDKLPENEWDLVFKPEYTAKLKSCG ISYFDSAIEQIPLALHYLGKD PSEN PEDIKA AVDMMKAVRG DVKRFSSSGYI DDMAAGNLCAIIGYGGDLNIAKTRAEEAANGVEIKVLTPTKGTVGVWVDSFMI PRDAQN VANA HRYIDYTLRPEVAKNGSFVTYAPASR PARELMD EK YTS DASI FPNKELMEKS FIVSPKSAESVKGVKLWQGLKAGK
65	0631	MAKV LIVPVSAGLDASAAAQAFAKALDAQI FQAVD AT ETLA QGK SDDWFDALVGKVAALDAANLVIEGIA PDADK IYLAGKNVELALSLDAAAVFAVRSNDAD ADELANR VNLAKQFFAAAPGVLEGFVVDGAAAASVAEAAA EKTGLTFFGSSDAKDVSVLAGREAKRLSPA QFRY NLIDFARQADK RIVLPEGAEPRTVQAAACHEKG IARC VLLAKREEVEA VAKERGI SLPDSLEI IDPASLVEQYV EPM C ERLRKS KGLT PEDAR KQLQD TVV LGMMAQNDVDGLVSGA VHTTAN TIRPALQLIKTAPGASLVSSVFFMLLPNQVLVFGDCAVNPNTAQQLADIAIQSADSAKAFGIDPKVAMIS YSTVN SGSGPDVDTVIEATKLAREKRPDLAIDG P LQYDAATVPGV GKSKAPGSPVAGQATVLVFPDLNTGNCTYKAVQRNA NVLSVGPLLQGLRKPVN DLSRGALVEDIVFTIALTAVQAK QMEG
66	0634	MKTSIRYALLAA ALTAATPALADITVYNGQHKEAAQAVADA FTRATGIKV K LNSAKGDQLAGQIKEEGSRSPADVF YSEQI PALATLSAANLLEPLPASTIN ETRGKGPVVAAKD WVALSGRSRV VYDTRKLSEK DLEKSVL NYATPKWKNRIGYAP TSGA FLEQVVAIVKLKGEAAALKWLKGKEYGKPYAKNSVALQAVENGEID AALINNYYWHAFAREKGVQNVHTRLNFVRHRDPGALV T YSGAAV LKSSQN KDEAKK FVAFLASKEGQ RALTAVRAEYPLNPHVVSTFNLEPIAKLEAPQVSATTSEKEHATRLL EQAGMK
67	0637	MHDKTWSGRFNEPVSELVKQYTASIGFDRRLAEWDI QGSLAHAQMLKETGVLD EGD LADI RRGMAEILEEIRSGKIEWSSDLEDVHMNIERRLTDKIGDAGKRLHTGRSRNDQVATDIRLWLRDQITV I QSLI QSLQTA LLDLAEQNAETVMPGFTHLQVAQPV SFGHHMLAYV EMLGRDNERMADCRCRVNRMPLGAAALAGTT YPIQREITAELLGFEQICQNSLD AVSDR DFAIEFTAAASLVMVHLSRLSEELI LWMSPRFGFIDIA DR FCTGSSIMPQKKNPDVPELVRGKSGRVIGHL TIGLITLMKSQLPLAYNKDNQEDKEPLFDTADTLIDT LIRIYADMMRGVTVKPDNMR AAVM QGFATATD LADYLVKGM PFRDAHEVVAQAVRHADQAGV DLSL PLEV LQGFSDLIADDVYGVLTPEGSLNARNH LGGTAPEQVRFQV KR WREM LA
68	0641	MADFNQILTPGDV DGGIIN VVNEI PAGSNHKIE WNRKLA AFOLDRV EPAI FAKPTNYGFIPQTLDE DGD ELDVLLVTEQPLATGVFLEARVIGV MKFVDDGEVDDKIVCVPADRNNGNAYKTLSDLPQQLIKQIEFHFNHYKDLKAGTTK VESWGDAEEAKKVIKESIERWNQ A
69	0663	MKKALATLIALALPAAAIAEGASGFYVQADA AAHAKASSSLGSAGFS PRISAG YRINDLRFAVDYTRYK NYKAPSTDFKL YSIGASAIYDFDTQSPV KPYL GARLSLNRASV D LGGSDSFQS TIGL GVLTVGSYAVTPNVDL DAGYR NYI GKVN TVK NVRSGEL SAGVRV KF
70	0697	MKEHKARKRGQNFQNLQDTRIIS DIVNAVRPQADDV VIEIGPGLAAITEPLAKKLNRLH VVEIDR DIVCRLK TLPFDKL VHEGDV LQFD FNGIAGKKI VGNL PYNISTPLLFKLAEVADDV DVMHFM LQEV VVERMVAAPKSNDYGR LGV M LQYFFDMEMLIDVPPESFD PAKV DSAVVRMIPV KHRIGKADDFEHFAKLVKLA FH QRRKTIRNNL KELAG DDDL QAVGINPQDRAEHI APEK YVALS NYLAGKVV
71	0703	MKKILLTVSLGLALSACATQGTVDKDAQITQDWSVEKLYAEAQDELNSSNYTRAVKLYEILES RFP TS RHAQ QSQLDTAYA YYKDEKD KALAAIDR F RRLHPQHPNMDYALYL RGLVL F NEDQ SFLN KLASQDWS DRD P KAN REY Q AFAE LVQRF PNSK YAADATARMV KLV DALGGNEM S VARY YM KRGAYIAAANRAQKTIIGSYQ NTRYVEE SLA L E LAY KKL DKP RLAADTRV LETNFPKSPFLKQPWRSDDMPW WRYW H
72	0711	MSSGNIHIHSMTGFANAAAECGSKRINLDLRAVNHRFLD QI RMPD DLRYLES GIREKISSHIARGKVECKIQI QD AENGQSLELNRDLVGQ LAEINKDLRKHDLIAKLG VADILRFPGV L ASQ RENT E LAKSIT E LK DFT AARK REGKKLGEHLQRL EAM EEEI DALSEL FPTL EETHKEKIRARLVEAVGSIDNDRLQ QEFALF IQKSD DIDEFSRLR

		THIAEVRRIVTEHKSSGKRLDFLMQELNREANTLGSKSIAAECTQASVELKVLIEQMREQVQIE
73	0720	MLNITLPDGSRQYESPVTVAQIAASIGAGLAKATVAGRNGKLVDAACDPIVEDSAVQIITPKDQEGIEIIRHSCAHLVGHAVKOLYPNAKMOVIGPVIEEGFYDIAETKPFPEVAAIEARMKELIAQDYDVVKIMTPRAEAIKIFQERGEYKLRLLIDMPPEVEAMGMYHHQEYVDMCRGPHVPNTRFLKNFKLTKLAGAYWRGDSNNEMLORIYGTAWATKDELKAYIQRREEAEKRDHRKLGKQLDLFHLQDEAPGMVFVWPKGWALWQVIEQHMRKELNAAGYKEVKTPOIMDKTFWEKSGHWDNYKDNMFVTSEKREYAVKPMNCPGHVQIIFNNGLRSYRDLPMRLAEFGSCHRNEPSSALHGLMRVRGFQDDAHIFCTEDQIVSEARAFNELLIRIYKQFGFHDVSVKSRLPEKRGASDDVWDKAEQGLREALTACGVWEGELPGEAFYGPKIEYHVRDALGRSWQCGTLQLDFVPERLNAEYVTENDRARPVMLHRAILGSLERFIGILIEHAGSFPLWLAPVQLVIMNITEQADYCREVAAKLQAAGFRAELDLRNEKIGYKIRDNSQYRFPYQIVVGDKEKQENKVAVRKRAEDLGSLDDDFIAQLQQEITDALVNH
74	0724	MENVNRIVAEGIAAVEAAQDFNALEQIKARYLGKGETGLLTKLQMSPEERKTIGAHINECKNRQTAFNKREALNEVKLQARLAAEALDITLPGRAQEGGSLHPVTLTLQRVVELFHMGMFEADGPEIEDDFHNFQALNIPANHPARAMQDTFYVENGDVIRTHTSPIQIRYMLDKKEPPIRIAPGRVYRVDSDATHSPMFHQAEGLNVEEGVTFAIDLKAVFTDFIRFFFERDDLQVRFRPSFFPTEPSAEIDIMGENGWLEVGCGCMVHPNVLKVNIDPEKTYGFAFGIGLDRFAMLRYNVNDLRLFFNDLNFNLQFAK
75	0728	MQFSYSWLKTQADTELSSDKLEHLLMSGLEVEEAETAAPAFAGVIAEVSKVEKHPDADRLNVTRVDAGTGGLVQIVCGAPNVKAGIKVPCSLPGAVLPGNFKIKPTKMRGEVSDGMLCSTDDELGLPDDGVNGLHILPEDAPVGTNIREYLDLDDTLFTLKIPNRRADCLSIKGIAREVSALTGCAFROPEIHTAPITGSRKQPQVQINAPADCRFISRVENVNARATTPWDWKQRLERSGIRSIASLVDIGNYVMLEIGQPMHVDADKLSLHSIRRAREGETLECLNEKTVSLSSENTLVVADEKGVLISLAGLMGGAASAVSDGTQNVLEAAWFAPEIIAGKSRSQYGFSDSSFRFERGVYDRLQADAIERATELVLQICGGAAGEMVEAQGELPEAKQVGLRDLRKTVLGVDPAAEQVETILOQHGLQPEKTAEGFRVTAPSFRFDIEI EADLIEEIGRVYGYENIPDDYTSGRLKMLELPETRRPRFAVYNEMAARGYREVVSYAFVDEQWEQDFAAANADPIRLQNPLAAQYAVMRSTLIGGLVEILQNNLNRKQNRCVCFETARVFSKGSDGQFVQNERIGGLWYGAVMPEQWGGKTRNADFYDIKADVENLLKNKAVEFVKTGHPAHPGRAANIVSDGKIGFVGELEHPKWLOQYDLPQAPLVFEIDMAAVLECGKTRYRVVSKFQPVRRDLIAFMPEAMSHDDLLVLKGAAKLVQEISVFDVYRGTGLPEGMKSVAVKVILQDMENTLTDEAVEPLIGKLIGAATAAGARLRS
76	0743	MGGQKTHFGFSTVNEDEKAGKVAEVFHSVAKNYDIMNDVMSAGLHRVWKHFTINTAHLKKGDKVLDIAGGTGDLRGWAKRVGKEGEVWLTDINSSMLTVGRDRLLNEGMLLPVSLADAELPFPDNFNLVSVAFLRNMTHKDAALKEMYRVLKPGGTLLVLEFSKIKYKPLEGAYDFYSFKLLPVMGRILIAKDAESYQYLAESIRMPDQETLKQMMLDAGFDSDVYHNMSSAGIVALHKGKVF
77	0757	MSEIGLVKIIYFGKVRDLYEIDDKRMLMVASDRLSAFDVILODDPIPSKGEILTOISNFWFKKLAHIMPNHTGOTVYDVLPENEAKALEKRAVVAKKLTPVKVEAVRGYLAGSGWKDYQKTSVCGIQLPEGMQEAQQLPEVIFTPSTKAAVGDHDENISFEECGRIIGKELAEEVRAKAVRLYTEAAEYAKSRGIICDTKFEGFLDENGTLLMDEVLTPDSSRFWPADQYKVGTNPPSFQFVDRWLQSGWNKKAPAKKVPADVIQKTVKEYREALTLLTQD
78	0758	MMFDKHKVKTFOQGNQTVLETGEIARQAAAIVKVSMDGTVVLAFTTNKEVKEGQDFPPLTVDYLERTYAAGKIPGGFFKREGKQSEKEILTSRLIDRPIRPLFPEGFYHDIQIVAMVSVDPEDSIPIAMLGASAALVLSGVPFAGPIGARVGYVNGVYVNLNPTKAELAKSOLQDVLVAGTSKAVLMESEAKILPEPDVMLGAVVYGHQDMQVAINAINEFADEVNPELWDWKAPETNEELVAKVRCIAGETIKEAFKIRQKQARSALKDEAWEASVAKELITEETDTILAANEIKGIFKHLEADVVRSQLDQPRIDGRDRTVRLPLNQTSLVPRTHGSALFTRGETQALAVATLGTSDREQIIDALSGEYTDRLMLHYNFPYSTGEVGRMGAPKREIGHGRLLAKRALLAVLPKPEDFSYTMRVVSEITTESNGSSMASVCGGCLSLSSAGVPLKAHVAGIAMIAGLILEGNKFAVLTIDLGDEDHLDGMDFKVAGTTEGVTAQMDIKIQGITEIMQIALAQAKEARLHILDQMKAAVAGPQELSAHAPRLFTMKINQDKIREVIGKGGETIRSITAETGTEINIAEDGTITIAATTQEAGDAKKRIEQITAEEVEVGKVEYGTVVKILDNNVGAIVSVMPGKDLVHISQIAHERVRNVGDYLQVGQVNVNKALEVDRGRVRLSIKALLDAPAREENAAE
79	0763	MKIANSITELIGNTPVVLNRLTEGLKAEVAVKLEFFNPGSSVKDRIAEMIEGAEKAGKINKNTVIVEATSGNTVGGLAMVCAARGYKLAITMPESMSKERKMLLRAFGAELILTPAAEGMAGAIKAKSLVDADHPDTYFMPROFNEANPEVHRKTTAEEIWRDTDGKDVFVAGVGTGGTITGVGEVLKKYKPEVKVVAVEPEASPVLSGGEKGPHPIQGIGAGFIPTVLNTKIIYDSITKVSNEAAFETARAIKEGILVGISSGAWSALQAKOPENEGKLIVVLLPSYGERYLSTPLFADLA
80	0778	MPSETSSPRKENETEVHPPAPFIVKQSGSNALAVCALVIAALGLGTSGFLFVQGQNLKQELAFNQKIDKAALGESENAALLKDNLNRLQAAIQSELDRLDGNVKANGEQILEMQSYRELTGKGRADWLVDETETIILNLAQQLVLTGNIQTAGVGULEHIDSRLSRFNQAEELPIKQAVSSDLAELKNRPYVDISGTLRDLRETAVGLPLMDDGVLKPGVQVKNEAASASWWQNVWEKSLGTLKGLVEIRRLNNDAMLIISPEQAYFVRENRLRLLDARTALMQRNSEVYQGDLNNAEAARQYFDAKSPATQSWLKELAELKALDVRMTADDGLKNSLNAVRAYRDGTRMTAAENQEAEQAASEPEANETKASEPAAASDVKTIEAPSLPSERKPEQPAKKQTVPEKAGRSPSAKGERA
81	0791	MIILHTNKGDIIKIELDFDKAPVTAKNFEQYVKDGFYDGVIFHRVIKGFMIOQGGMDENMNEKETRDPIQNEASNGLPNDKYTIAARTSDPHSASAQFFINTADNAFLNFRSKELYGKTVQDWDGYAVFGKVVDFDVDAIEGVSTKRHGYHDDVPSEPVIIKAEAV

82	0804	MTVLSKEQVLSAFKNRKSCRHYDAARKISAEDFQFILELGRSPSSVGSEPWQFIVVQNPEIROQAIKPFSWGMADA LDTASHLVVFLAKKNARSDSPFMLESLKRRGVTEDPAVAKSLARYQAFQADDIKILDDSRAFDWCCRQTYIALAN MMTGAAMAGIDSCPVEGFNYAEMERILSGQFGLFDAAEWGVSAATFGYRVQEIAKARRPLEETVIWA
83	0814	MOTWQLPEHIAVLPTNARQLESAREQLLALFRVHGYELVQPPMLEAHSLLTHIDAGLSLKTILVTDRLSGRQLG IRADITPOVARIDAHLLSANQGINRLCYAGPVLHAQPDGLLNMRPEPLQAGAEMYGFADIRGDIELIDLMLKSMKIA DMGKVLLSLGHIGIFRALSDAAHLDAGQSATLLALMQDKDTGAVEAQVKAWKLDGMWAKAFSLLPRLYGGREVLSD ARGRLPDLSAVGGALGELQAVCDAPDCEIHDLSELRVVDNYHTGLLYAAYAADFHDAVARGGRYDGLGGYFGRAR PATGFSFDLRSFIGRLPAIERQPAVLVDAEAAHEAHEALREOGQCVVIDYIGHNVSEELAGRKKTDGVWQV VKR
84	0815	MAMAKNVVIGAQWGDEGKGKIVDWLAEAGGVVRFQGHHNAHTLVVGGKKTILRLIPSGILHESLDCFIGSGVV VSPEALGEDELNAAGVKNVEGRKLIAPTCPLILPYHIALDQAREASRGKGKIGTTGRGIGPAYEDKVARRAIRA ADLLHPEKLRKLDLAVLAYNVQLQHLHNAEPVKAEDVMAVIEKVAPRIAPMITDVSRLVNEKNKNGEKLFFEGAO GALLDIDYGTYPFVTSSNCLAGAASAGAGVGPQMLDYLVGIVKAYTRVSGPFPTELFDEVGVGLAERGHEFGSV TGRARRCGWFDDAALKRSITQINGISGMCITKLDVMGVETINICVGYELPDGGKTDILPCGSDAVETCKPIYETMP GWRESTFGVKDYGALPENAKYLKRIEVCAGAPVAIVSTGPDREETIVLHHPF
85	0828	MTIIVTGAAGFIGSNIVKALNQRGITDIVADNLSKGEKFKNLAECEIAHYLDKHEFIRQVREHILPYQNIIEAVFH QGACSDTMNHGDLYMMDDNNYQYTLDDLWQCDERIPFLYASSAAVYKGGEIFREEERELEKPLNVYGYSKLFQDVL RRRMKEGLTAQVVGFRYFNVYQHGKGRMASVAFHHFHQYREHGVNLFGSNDGYGNGEQTRDFVSVEDVAKVN LYFFDHPLELSGIYNLGTGRSQQFNELAATVNACRAEGKPEMSLKEVVEELIRYIPFPDALKGKYQSFQTQADIT KLREAGYKEEFFDVKSGVDRYVKWMLENLA
86	0854	MAQKIQSVKGMDLLPVKQKDFKLTAQFWQAFEDTVGRWTRAYGYQQIRTPIVEQTGLFVRSIGEETDVGKEMYT FSDSNDSLSSLRPEGTASCLRAVVEHNNLLYNSPQKLWYMPGMFRRERPQKGRYRQFHQVGEALGFEGPDIDAEI IAMSADLWEKLGIREYLTLIEINSLGNEERAHRAALVEYLTRYEDKLDDESKRLLKTNPLRVLDTKNPDLQEIICN AAPRLVDYLGEDSQNHYVRFKAMLDGLQYIENPRLVRLGDYNNQTVFEWTTDKLGAQATVCGGGRYDGLIEELG GKPAPSIGFAMGIERLLLVESEYGSLEVNAAPDVYAMHQEGADLQVMKYAQLRAQGFNVMQHSGYQSLKAQMKK ADNSGARFALIVAQDELANGTVTLDKMDNGAHGQQTVAEADLTPTLQQWKNA
87	0875	MAAYDSLMVFTGNANPELAQRVVRHLDISLGNASVSKFSDGEAVEVELLENVRGRDFVILQPTCAPTNLMEILTM ADALKRASAGRITTAIPYFGYARQDRRPRSRVPISAKLVANMLYSAGIDRVLTVLHADQIQGFFDIPVDNIYAT PILLNDIKQORIENLTVVSPIDGGVVRARAVAKSLNADLAIIDKRRPKANVAEVNNIIGDIQGRTCLIVDDMIDTA NTLCKAAVALKERAERVLAYASHAVFSGEAVSRIASSEIDQVVVTDTIPLSEAAKNCDRIRQVTIAGLLAETVRR ISNEESVSYLFNEEVMTGSMLLP
88	0876	MTYEIQASVREAQGTGASRRLRREGQIPGILYEGOEPVIAVDHKTVFYALEKESFHTALIKLSLNGETKDVIVR DFQMHPFRREVOHIDFQAVKADQLVRIRVPLHIVNAENSQAVLQGGRVSLINTSVEVVALPANIAPFLLDCAEV VAGDILHLSDIKLPPEGVESVSLKRNNENLAVATVTGKR
89	0878	MNTPLPYSDYLIRILTASVYDVAVETPLEPARSLSVRLKNNILLKREDLQPVFSFKIRGAYNKMSKLPKDALACGV IAASAGNHAQGVALSAQRILGCRAVIVMPETTPKIVDAVKSHGGEVVLGVSYNDAYDYMELAEKEGLTYIAPFD DPDVIAQGQTVGMEIVSQHPDPIRAVFVPIGGGLAAGVAAFIKQVRPEIKVIGVQTNDCSCMKQSVEAGEIVHLK DVGLFSDGTAVKVVGNETFRICKELLDEIITVTDAVCGAVKDFDDTRSITEPAGALALAGLKAYIAREGAENQT LIAVTSGANMFHRLRHVSERSELGENEGIFAVTIPEERGSFLKFVNILGNRNITEFNYRYGDDEKAHI FVGLQA AGPQDLAVIGSRLDEAGLPNVDLTNNEIAKIHRYMVGGRTDKVENERLVSFEPPERPGALARFLNMQGGWNITL FHYRNHGADYGRILVGDVPPHDAAFDGFLESLGYSYHEETQNAAYKLFLA
90	0884	MEHKLQPQPYELDALSPLHSKETLEFHGKHHQTYITNLNNQIKGTEFENPLLEEIVKKSSGGVFNNAAQWTWNHTF YWLGFSTKGQGKPAGELAAAIADKWSFEKFQEAFCNACAAGTFGGSGAWLVKTPAGGLDLVSTSNAATPLTTENTP LLTCDVWEHAYIDYRNSRPNLYLKGFWEVNWDEVAKRFAALS
91	0885	MNDYAAPSESDREVGALSPPHSMEAQSVLGGLMLENPAWDRIADVSGEDEFYRHEHRLIFRSIAKLINESRPAD VITVQEDLQRNEELEAAGGFEYLITLQAQNTPSAANIRYAEIVRERSIMRQLAEVGTEIARSAYNPQGRDAGQQLD EAENKVFQIAESTAKSKQGFLEMPDILKEVVRQIDMLYSRDNPDEVTVGPTGFIDLDKKTSGLQPGDLIIIVAGRPS MGKTAFSINIAEHVAVEGRLPVAVFSMEMGGAQLVMRMLGSVGRLDQSVLKTGRLEDEHWGRLNEAVVKLSDAPVY IDETPGLTAELRARARRIARQFNNKLGLIVIDYLQLOMAGSGRSNRASELGEISRSLSKALAKELQVPIIALSQLS RTVESRTDKRPMMSDLRESGAIEQDADLIMFMYRDEYYNQDSPMKGLAECIIGKHRNGPVGKIFLTWTGQFTKFDN AAYIPEEAKIED
92	0894	MNTLLNQLKPYPFARLREAMQGISAPEGLEAVPLHIGEPKHTPKVITDALTSLHELEKYPITAGLPELRQACAN WLKRRYDGLTVADNEILPVLSREALFSFVQTVLNPVSDGIKPAIVSPNPFYQIYEGATLJGGGEIHFANCAPS FNPDWRSISEEVWKRTKLVFCSPNNPSGSVLDLGWKEVFDLQDKYGFIIASDECYSEIYFDGNKPLGCLQAAAQ LGRSRQKLLMFTSLSKRSNVPGLRSGFVAGDAELLKNFLYRTYHGSAMSIPVQRASIAAWDDEQHVIDNRRMYQE KFERVPILOQVFDVLPDASFYIWLKVPGDDLALARNLWQKAQIQLPGRFLARDTEQGNPGEGYVRIALVADV ATCVKAAETIVSLYR
93	0920	MTQKSTIVYHTDEAPALATQSLLPIVQAFARHADIDVKTSDISLSGRILAAFPEYLTEAQRVPDALAELGELVKQ

		PDANVIKLPNISASVPQLTAAIKELQSKGFAVPDYPADPOTDEEKAVRERYDRIKGSAVNVLREGNSDRRAPKAV KNFAKKNPMSGAWTKDSKTHVATMGSDFHNEQSVIVPEATSVSIVFTDKQGNKKELREPVALKAGEIIIDATVM SKKALLAFLAEQVKDAKAKGVLFSLHMKATMMKVSDPIIFGHAVKVFAPVFEKFGDKLAAAGVNVNNGFGNLLAN LDKLDADTRTAVEAEIAAVYAANPDLAMVDSDKGITNLHVPSDIVDASMPAMIRNSGRMWDKNGKAQDTKAVIPD SSYAGVYQATIDFCREHGAFFPTTMGTVPNVGLMAQAAEYGSNKTFEIADGQVQVIDAAGKVLQMHDVEAGDI WRMCQTKDAFVKDWVQLAVNRARLSNTPAVFWLDERPHDKSLLAKVKAYLAELDTNGLDIRVLAPEEAQFSLGR LKNGEDTISVTGNVLRDYLTDLFPILELTSKMSIVPLMNGGMETGAGGSAPKHVQQFLEENHLRWDSLGEF LALAVSFELAQLKTGNAKAQLADTLDAATEKLLNDKSPKRKAGELDNRGSHFYLTLYWAQELAAQDKDAELKAA FTPLAAALTDAEAKIVAELSAVQKAADIGGYYAANPEAKAQMVRPSVTFNQALNA
94	0944	MTTLHFSGFRVGAFRELKFAQEKYWRKEISEQELLAVALAKDLREKNWKHQVAANADFVAVGDFTFYDHILDLQVAT GAI PARFGFDQSOLNSLEQFFQLARGNKDQFAIEMTKWFDTNYHVLVPEFHADTEFKANAKHYVQQLQEAQALGLKA KPTVVGPLTLFWVGKEKGAVEFDRLLSLPKLLPVYVEILTALVEAGAEWIQIDEPALAVDLPKEWVEAYKDVTATL SKVSAKILLSTYFGSVAEHAALLKALPVDGLHIDLVRAPFQDAFADYDKVLASGVI DGRNIWRAANLNKVLETVEP LQAKLGDRLIWSSSCSLLHTPFDSVEEKLANKPDLYSWLAFTLQKTQELRLVKAALNEGRDSVAEELAASQAAA DSRANSSEIHRADVAKRLADL PANADQORKSPFADRIKAQQAWLNPLLPTTNIGSFQOTTEIRQARSAFKKGELSA ADYEAAKKEIALVVEEQUEKLDLVLVHGEAERNDMVEYFGE LLSGFAFTQYGVWQSYGSRCVKPPIIFGDVSRPE AMTVAWSTYAQSLTKRPMKGMLTGPVTLQWSFVRNDIPRSTVCKQIALALNDEVLDEKAGIKVQIDEPAIREG LPLKRADWDAYLNWAGESFRLSSAGCEDSTQIHTHMCYSEFNIDILPAIAAMDAVITIETSRSDMELLTAFGEFQY PNDIGPGVYDIHSPRVPTEAEVEHLLRKAIEVVPERLWVNPDCGLKTRGWKETLEQLQVMNNVTRKLRAELAK
95	0946	MALQDRTGQKVPSVVFRTRVGDWTKVDDLFKGKVVVFSLPGAFPTCSSLHPRYNELFGAFKENGVDIAIC VSVNDTFVMNAWAAEESDNIYMPDGNGEFTEGMGLVGKEDLGFGRKSWRYSMLVNDGVVEKMFIEPEEPGDPF KVS DADTMLQFVAPDWKAQESVAIFTKPGCQFCAKAKQALQDKGLSYEEIVLGKDATVTSVRAITGKMTAPQVFIG GKYIGGSEDEAYLAKN
96	0947	MKKIQADVVVIGGGTAGMAGFRNARLHSNDVYLIENNFGTTCARVGCMPSKLLIAAAEARHHALHTDPFGVHLDK DSIVVNGEEVMQRVKSERDRFVGFWADVEEWPADKRMGSASFIDEHTVQIDEHTQITAKSFVIATGSRPVILPQ WQSLGNRLIINDDVSWDTLPKRVAVFGPGVIGLELGQALHRLGVKVEIFGLGGIIGGIDPVSDEANAVFGEEL KLHLDAKTEVKLDADGNVEVHWEGDGEKGVFVAEYMLAAVGRPNVDNIGLENINIEKDARGVPVADPLMQTSIP HIFIAGDASNQLPLLHEAADQGKIAQDAGNAGRPNIGGGLRRSTIGVVFTSPQIGFVGLKYAQAQYQADEFVIGE VSFKNQGRSRVMLVNKGMRLYAEKATGRFIGAEIVGPAEEHLAHLLAWAHQMKMTPQMLMPFYHPVIEEGLRT ALRDADAKLA
97	0955	MMDEKLNFSYLFGSNAPYIEELYEAFLENPDADKEWKQYFTDLSKQPGTVAVDVAHTPIRESFVTI LAKKIASAV AGGADEAMLKQVSVLRLISAYRIQVGAAQLDPLKRIPPRDIEALDPKFHGLSDADMALQFMGEGLFANRGKLP LSQIISNLKQTYCGHIALEYIYIPNTEERRWVNRFESVLSTPHYNADQKRRLKEMTAAETLERYLHTKVGQKR FGVEGGESIAGLNYLIQNAQKGDGVEEVIIGMAHGRGLNLVNVILGKPGDLFAEFEGRAEIKLPSGDVKYHMGFS SDIATPHGPMHVSLAFNPSHLEIVNPVVEGSARAKQKRLGENGRDKVLPVLIHGDSAFIGLGVNQATFNLSKTRGY TTGGTVHVINNQIGFTTSDIRDTRSTVHCTDIAMVSAPVIHVNNGDDPERVCFAIQAALDYRKFKHDKDIVDVVC YRKWGHNEGDDPTLTQPMYKKVSVQHPGARALYTEQOLIAEGVVTQAEADGYIQA YRDALDKGEHVEQTTLSNFQRT QIDWSKYQGKDWRHETGLPAADIERLTEKFTAVPEGFALHPTAKRVIEARKAMASGKQAI DWGMAETLAYASLV TKGHGVRISEDGSGRTFSRHAVLHDQKREKWDGTVPLRHMGEGMGEFLVIDSILNEEAVMAFEYGFACSA PD KLTIWEAQFGDFANGAQVTTIDQFLSSGETKWGRLCGLTILPHGYDGQGPHEHSSARVERWLQLCSENNMQVIMPSE ASQMFHLLQRQVLGSYRKPLVIFMSKRLRFKGAMSPLENFTEGSTFRPVIGDTAERASNDSVKRVVLCAGQVYYD LEAGRAERKLEDDVAIVRVEQLYPFPYDEVKAELAKYPAKSVVVAQEEPKNQGAFYQIRHRIEDVISEEQKLSYA GRPSSASPAVGYSSKHHIAQLKQLVEDALAL
98	0956	MIIDVKVPMILSESVSEGTLLEWKKGVEA VARDEI LIDETDKVVL E VPSQAGV LVEIV A QDGETV VADQVLARV DTAATAAAEAPAAPAEEAAPAATQNNAAAMPAAKLAETGVDVNALQGSGRDGRVLKEDVQNAAKPAGAAA PAVALPAGARPEERVPM SRLRARVAERLLASQQENAI LTTFNEVN MKPIMDLR A KYKEKFEKEHGVKLGFM SFFVK AAVAALKKYPVNASVDGKDIVHGYFDIGIAIGSPRGLVVPILRDADQMSIADIEQAIVDYAKKA KDGKIAEDL TGGTFSITNGGTFGSMMSTPIINPPQSAILGMHATKERAVVENGQVVVRPM MYL ALSYDHRIIDGREAVLTVAIK DALEDPARLLLDL
99	0959	MNLHEYQAKELLASYGLPVQGGILAHNGEEAAAAYDKLGGKFAVVKAQVHAGGRKAGGVKVVKSREEAKEVAESL IGTNLVTYQTDANGQPVNSVLVCE DMYPVQTELYLGAVVDRSTRITFMAS TEGGVEIEKVAETPEKIFKVTVD P LVGLQPCQAREVAFQQLGLDKQINEFVKLMTGAYKAFVENDFALFEVNPLAVRENGALACVDGKIGIDSNALYRLP KIAELRDKSQENERELKASEFDLNYVALEGNI GCMVNGAGLAMATMDI I KLKGQ PANFLDVGGGATKDRVVEAFK LILEDKSVQGVLINIFGGIVRCDMIAEAI A VAVKEINVNPVVRLLEGNNAEGLAKILNESGLKLTSADGLNDAAE KIVAAVNA
100	0960	MSVLINKDTKVLVQGFTGKNGTFHSEQALAYGTVVGGTPGKGGQTHLNLPFNTMKEAVKETGADASVIYVPAP FVLD SIVEAVD SGVGLVVVITEGVPTLDMLKAKRYIETNGNGTRLVGPNC PGVITPGECKIGIMP GHIHTPGRIGI ISRSGLTLYEAVAQTTKLGQSTCIGIGGDPIP GMQIDALKLQEDPDTDAIIMIGEIGGTAEEAAYIQSNV SKPVVGYIAGVTAPKGKRMGHAGAIISGGKTAEEKFAAFEKAGIAYTRSPAE L GTM LEV LKAKGLA

101	0983	MSSIKRALISLSDKTGAVEFAQTLHKLGVEILSTGGTAKLLADAGVPVIEWADYTGFPEMLDGRVKTLPKIHGGI LGRRDLDEHVKMEEHGINIDLVCVNLYLFAATIAKPNCTLEDAIENIDIGGPTMVRSAAKNWKHVAIVTDTADF PAIAAELEANNGALSDKTRFNLSRKAFSHTAQYDGMISNYLTSLSDDVLSGTPEIAGFPGRFNQSWIKVQDMRYGE NPHQRAAFYRDIRDPAAGSLAAVKQLOQKELSYNNIADADAWEAVKSFDVPACIVKHANPCGVAIASNTLDAYKL AYATDTSAFGGIIAFNREVDGATVKQITDNQFMEVLMAPKFTAEEALEIAAAKKNVRVLEVPLEAGANRFELKRVG GGLLVQTPDIHRISRADLKVVSKRQPTEQEWNDLFFVNVAKYVKSNAIVFGGGQTYGIGAGQMSRVDSTRIAAR KAQDAGLDLNAGACAASDAFFPFRDGVDIVAEQGKAIIPHAGSMRDQEVDAAEHGIAMVVTGIRHFR
102	0997	MSASQLLSRLTQTVGEKYIITDPAKTEQYRQGYRFGEGKALAVVRPGSILEMWKILQACVEADVVIVITQAANTGLT GGSPDGNDYDRDIVVNTRMRNIIQTIINNNEQVVLCPGSTLNQLELLLKPLGREPHSVIGSSCIGASVLLGVCNN SGGALVQRGPAYTEMALFAQINEEGRLELVNHLGIDLGNTPEEILTNLQGHYQNKDITQDAGKGHDHAYCEHVRQ VDEPTAARFNADPARHYEASCGACAKLVMFAVRLDTPQEKQTAVFYIGTNIDINELDIRRAALGEFESLPVSGEYI HRHAFDIADVYKGDTFYVIKKFGTHQLPKLFDLKARVDRFGKKVSFLPKHFSKFLPDHLPKSMRDYRD KYEEHHLILKMGKGKVDEARAFLKEYFAHHGGAFFECNAETQAAMLHRFAVASAIRYRAVHDDEVEDLVALDIAL RRDDRDWFELPPEIDNKIIHKLYYGHFMCHVFHQDYIICKGNDCMALEHEMLHLLDQRGQAQYPAEHNVGHLYEAK PALKQFYRKLDPTNSFPNGVKTSKKNWAE
103	1031	MTKHIAILRGDGIGPEIVAETVRVLDKLIAQGLADAYEYAPLGGEAYDEYGHPYPEFTQNLCKADAVLLGAVGSP QYDNLDRPLPERGLLAIRKDLNLFANLRPAVLYPELANASTLKEPEIVAGLDILIVRELTGDIYFGEPRGIRVLEN GEREYNTMKYSESEIRRIAHVAQFQSAQKRSKKVCSVGKANVLETTELWREIEEIGKEYPDVELSHMYVDNAAMQ LVRAPKQFDVIAUTGNIFGDLILSDEASMLTGSIGMLPSASLDENGKGLYEPHSHGASDIAGQNKANPLATILSLAML LRYSLNDEARAQVENAVQVKVLQQGLRTSDIYEEGTKLVCSCSEMGAVALAAL
104	1044	MAAFNTQKVLSVHHWTDAYFTFTCTRDESLRFENGQFVMVGLMDKGKPLMRAYSVASANWEEHLEFFSIKVQDGPL TSRLQHLKVGGDDVLISKKPTGTLVAGDLNPGKHLYLLSTGTGIAFPANTSITKDPEIYEQFEKIIILVHGVRYKKDLAY YDRFTKELPEHEYLGDLVKEKLIYPIVSREEFEHHGRLLTDLMVSGKLFEDIGLPKINPQDDRAMLCGSPAMLKDT CKVLDDEGLTVSPKTGVRGDYLIERAFTDQ
105	1046	MKYIISTRGETAHKPFSEVLLMGLAPDGGMLPEHYPQIGRETLDKWRLGLAYPELAFFEIMRLFVTDIPEDDLRLDILN RTYTEAAFGTKEITPVRTLSDGKIKIQLASNGPTLAFKDMAMQFLGNAYEVLNKEGKLNILGATSGDTGSAEYA LRGKKGVNVFMLS PGDKMSAFORAQMSLQDENIHNTAVKGMFDDCQDIVKAVQNDAAFKEKYHIGTVNSINWGRI VAQVYYFAGYFNATSSNDETVSFCVPSGNFGNVCAHHIAKQMGLPIRRLIVATNENDVLDEFFKTGAYRPRNSAH TYVTSSPSMDISKASNFERFVFDLMDRDPAEINTLWAevaAGKGFDLRFALDKVGGKYGFTSGKSTHADRLATIKQ VYEQDQELIDPHTADGVKVAREVREEGEMVVCLETALAAKFDATIREAVGDAI PRPAALEGLENLPQRVQTPNS ADAVKGIIEQTLA
106	1053	MKKTVFTCAMIALGTAAAQELQTAQNEFTVHTDLSSISSTRAFLKEKHKAAKHSIVRADIPFDANQGIRLEAGFG RSKKNIINLETDENKLGKTKNVKLPTGVPENRIDLYGTYTQTLSDSLNFRVAGLGFESSIONKTTKHTLHSS RQSWLAKVHADLLSQLGNQWYINPWESEVKFDLNSRYKLNTGVTNLKKDINQKTNWGFGGANIGKKLGESASIEA GPFYKQRTYKESGEFSVTTKSGDVSLSLIPKTSIREYGLRVGIKF
107	1070	MTQTNVIIIFDTTLRDGEQSPGAAMTKEEKIRVARQLEKLGVDIIEAGFAASPGDFEAVNIAKTITKSTVCSLS RAIERDIRQAGEAVAPAPKKRIHTFIATSPPIHMEYKLKMKPKQVIEAAVKAVKIAREYTDDEFSCEDALSEIDF LAEICGAVIEAGATTINI PDTVGYSIPIYKTEEFFRELIAKTPNGKVVWSAHCHNDLGLAVANSLAALKGGRQVE CTVNGLGERAGNASVEEIVMALVKRHDLFGLETGIDTQIVPSSKLVSTITGPVQPNKAIVGANAFSHESGIHQD GVLKHRETYEIMSAESVGWATNRLSLGKLSGRNAFKTKLADLGIELESEEALNAAFARFKELADKKREIFDEDLHA LVSDEMGSMNAESYKFISQKISTETGEEPRADIVFSIKGEEKRASATGSGPVDIAFKAIESAQSGAALQIYVNA VTQGTESQGETSVRLARGNRVNVNGQGADTDVLVATAKAYSALSKEFSAKPKAQSGSTI
108	1073	MIKISTRFDAGSVVVVKDLTDPSNIRLALRPDNASDFAQWYFRLOQAAAYQNCIMHFENAAAAYPKWEGYQACAS YDRRNWFRVPTSYENGVLTVNHTPLSNSVYYAYFEPYSEEQHNLNLGDAQGSLCRIDDLGTVQGRDINLLTIGN QVESDLKIWTARQHPGETMAEWFIEGLLGRLLDPQDPTARALLDRATFYIIPVNMPDGSAQLNRTNAAGANLNR EWENPTVEKSPEVFFVREKMLETGVDLFLDIHGDEGLPFVFGVAGTEGVPNYPNRPRIAALAEAQFKNALLNAPDFQDE YGYEKDAPGEANMTLATNWVGNRFNCLAYTLEMPFKDNANLPDDDFGNGQSRSLRGEAALSAILNVIGDLR
109	1127	MATLSDKTIILTVTGAQGLGEQVAKAYAAAGATVILVARHQKKLEKVKYDAIVEAGYPEPFAICFDLISAEKEFEHF AATIAEATQGKLDGIVHCAGFYALSPLDQTVAEWNQYRINTVAPMGLTRALFPLLKQSPDASVIFVGESHGET PKAYWGGFGASKAALNYLCKVAADEWERFGNLRANLVPGPINSPQRISLKGPEAKSERKSYGDVLPFAVWWASAE SKGRSGEIVYL
110	1131	MALLQISEPGMSAAPHRHRLAAGIDLGTNSLVTVRSGSAACLPDAEGRVTLPSSVRYLENGGIEVGKTALSAQK TDPLNTVSSAKRLIGRTIADLHQNTHYLPYRGDNQRVIELHTRQGVKTPVEVAEILKTLKSRAEETLGGDLVGV VITVPAYFDDAQROATKDAARLAGLNLVRLNEPTAAIAYGLDNASEGTFVYDGLGGTFDVSVLQLTKGLFEVK ATGGNSALGGDDFDHRLFCRLLLEQNGISQLNEQDSQLLSLVRAAKEQLTTQTEARIQATLSDGMAIDTSISRAEF HNLTOQHLVMKTLPEVTOQALKDAGVGKNEVKGVIMVGGSTRMLHVQOAVATFFGOTPLNNLNPDDEVVALGAIQANV LAGNKTDGEWLLDVTPLSLGLETYGGLAEKIIIPRNSTIPTARAQDFTTFKDQGOTAMTIHVVOGERELVADCRSLA KFTLRLGIPPMAGAARIRVTFQIDADGLLSVSAQEOSTGVQAQIEVKPSYGLDDDTITQMLKDSMSNAAEDMAARA

		RAEAVVEAESLTDVNAALELDSDLDAEELQQIRQIADLQGRLKDGKAEDIAAAALGSITDNFAAKRMNRNI QRALTGQSVNDI
111	1150	MPEYRSKTSTHGRNMAGARALWRATGMETDFGKPIIAVANSFTQFVPGHVHLHNMGQLVAREIEKAGAIAKEFNT IAIDDGIGAMGHGSMYSLPSRDLIADSIEYVMNAHCADALVCISNCDKITPGMLIAAMRLNIPТИFVSGGPMEAGK VIGVANIQPERRLDLIDAMIESADDNVSNRQVEEVEONACPTCGSCGMFTANSMNCLEALGLSLPGNGSYLATH AGRKEFLFLEAGRMIVEITKRYYEQNDETVLPRSIAKKAFENAMTMDIAMGGSTNTILHLLAVANEAGVDFKMDI DRLSRVVPICKTAPNNHDYYMEDVHRAGGIFAILKELDKAGKLHTDVHTIAPTLKDAIEQWDVTNPENTRAIER FKAAPGGVRTTQAFSQNRMWKTLDLDRKGCI RDVAHAYSDQGGLAVLFGNI AERGVVKTAGVDESILKFTGRAR VFESQEDAVEGILGNQIVAGDIVIIRYEGPKGGPGMQUEMLYPTSYLKSKGLGKACALLTDGRFSGTSGLSIGHAS PEAAEGGAIGLVHEGDTVEIDIPNRSIHLAISDEELAARRAEMEARGSKAWPKNRDRYVSAALRAYGAMATSADK GAVRDVAQIER
112	1201	MRIVEKAYTFDDVLLVPAHSTVLPDKLQTKL TREITLNPLLSAAMDVTTEARLAI SMAQEGGIGIIHKNMPPE MQARAVSKVKRHESGVVKDPVTVAPTTILIREVLEMRARQRKRKMSGPVENGKVVGIVTNRDLRFENRVDLPVSAT MTPRERLTVTPEGTSIDEARELMHTHVKVERVLVNEKDELKGLITVKDILKTTEFPNANKDSEGRRLRVGAAVGTGG DTEERVKALVEAGVDVIVVDTAHHGSQGVIDRVRWVKETYPHIQVIGGNIATAKAALDLVAAGADAVKVGIGPGSI CTTRIVAGVGVPQLTAIHNVAEALKGTGVPLIADGGIRFSGDIAKALAAGAYSVMLGGMFAGTEEEAPGEIELYQGR SYKSYRGMGSLGAMSQGSADRYFQDKTDSTDKYVPEGIEGRVVPYKGPIVNI IHQLTGGLRSSMGYLGCANIAEMHE KAEFVETSAQMSESHVHDVQITKEAPNYR
113	1206	MKGDRLVIRELNKNLGLLLVTINQYFLHARILKNWGFEELGEHFFKQSIVEMKAADDLIERILFLEGPLPNLQELGK LLIGESTEEI IACDLTKEQEKHEALLAAIATAEAQDYVSRLLEKQKDNEEHDWLETQELIGKIGLPNYLQ AAQED
114	1228	MKPVNIGLLGLGTVGGGTAAVLRDNAEISRRLGREIRISAVCDLSEEKARQTCPSAAFVKDPFELVAREDVVV ELFGGTGIAKDAVLKAIENGKHTANKKLLAEYGNEIFPLAEKQNIVQFEAAVAGGIPIIKALREGLAANRIKS IAIINGTSNFILEMREKSAFADVLEKAQALGYAEADPTFDIEGNDAGHKITIMSLAFGTPMNFSACYLEGIS KLDSDRIKYAEELGYRIKLLGIRKTKGIELRVHPTLIPESRILANVNGVMNAVRVNADMVGETLYYGAGAGALP TASAVVADIIIDIAIRLVEADTAHRVPHLAFQPAQVQATILPMDEITSSYYLRVQAKDEPGTILQIAALLAQENVSI EALIQKGVIDQTTAEIVILTHSTVEKHKSIAAAIEALDCVEKPTMIRMESLHD
115	1231	MTQKEKHFEYYAALATPLRDVVYPHMVLPLFVGRPKSIAALENAITREEPVFLAQTDAAVEEPIAADLYQTGT VAQVLQVLKLPDGTVKVLVEGLYRGRVLTIEDTGGFLVSHIETVVEEDTGGNTDLEAVRRTLLAQFEQYAKLNKKI PAEITIGSINGIAENSRLTDVTAAHLQLKLAQRQQILEIPEIGKRMFLLAQLESELDIMQAEKRIGRVKRQOMEKS QREYYLNQEIQKAIHKELGEEDENGELDAEADIKKAGMTKEAEEKCLSELKKLKMMPMSAESTVVRNYIDTLL PWKKKSRVSKDIAKAGLVLADHYGLEVKERILEYLAQKRMDKLKGPILCIVGPPGVGKTSLGESIAKATGRKY VRMALGGVRDESEIRGHRTYI GMSMPGKILQNMAGAVKNPLFLD EIDKLGNDFRGDPASALLEVLDPEQNNKFA DHYAEVVDLSDVMFIATSNSLNIPPLLDRMEIIRLSGYTEDEKINIAQYLVPKQMCRNGVKEGELAI EESAVR DIIRYYTREAGVRSLDREIAKICRKVVMQITLDEDEKKRLSETKKTSAKPKAVKVNEKNLHDYLGVRRFDYGVAES ENRIGQVTGLAWTEVGHELLTVEAAALPGKGVIQCTQGLGDMVKESVSAWSVRSRAESVGLAPDFYEKKDIIH VPEGATPKDGP SAGI AMTIAA SFTKIPVRADVAMTGEITLRGEVLPIGGLKEKLLAALRGGIKHVLIPKDNVKD LEEI PENVKTGLTIHPVKWIDEV LALGLESQPEPWAEPGAEAAAESASKPKPRS RATKH
116	1240	MISTNGITMQFGAKPLFENVSVKFEGNRYGLJGANGSGKSTFMKILGGDLEQTA GEVAIENGVRLGKLRQDQFAY EDMRVLDVVMGMHTEMWAAMTERDAIYANPEATEDDYMKAAELEAKFAEYDGYTAEARAAEELSGVGISEDLHN MAEVAPGFKLRLVLLAQLFSKPDVLLD EPTNNLDINTIRWLEGVLNQYDSTMIIISHDRHFLNEVCTHMA LDYN TITIYPGNYDDYMLASAQS RERALKDNAAKEKLQEFQARFSANKSKARQATSLRKQADKIKSEMVEVKPSTR ONPYIRFEADEKAKLHQRQAVEVEKLAKRFETQFKNLNFILEAGQRLIAIIGPNAGKSTLLKLAGAYNPEYSDGL LPDEGTIKWAEKASVGYPQDHENDFDVDMDLSEWMRQWGQEGDDEVIRGTLGRLLFGSNDVVKVKVLSGGEKG RMLYGKLLLKPNVLVMDEPTNHMDMESIESLNMALEKYNGTLIFVSHDRQFVSSLATQIIELDGKGGYEHYLDY ESYLEKKGVA
117	1252	MSTSLSYRDAGVDIDAGDQLVENIKPFAKRTMRPEVLGDLGGFGALVEIGKKYQNPVVLVSGTDGVGTLKLAFDWD KHDTVGIDLVAMSVDILVQGAEPPLFLDYFACGKLDVPRATDVIGIAQGCEESGCA LIGGETAEMPGMPVGEY DLAGFAVGVVEKENVITGRSIGVGDVVLGLASNGAHSNGYSLIRKIIERDNPDLDAEFDNGKTLREAVIAPTRLYV KPILAALEKFTIKGMAHITGGGITENVPRVLPENTVAQIDAKSWELPKLFQWLQAGNVETQEMYRTFNCIGMVV IVAAEADADAVQGLLGEQGETVYRLGLIRERQGDEHQ TQVA
118	1301	MSMENFAQLLEESFTLQEMNPGEVITAEVVAIDQNFVTVNAGLKSES LIDVAEFKNAQGEIEVKVGFVTTIESV ENGFGETKLSREKAKRAADWIALEEEAMENGDI LSGIINGKVKGGLTVMISSIRAFLPGSLVDRPVKDTSHFEGKE IEFKVIKLDKRN VVVSRRAVLEATLGEERKALLENLOEGSVIKGIVKVNITDYGAFV D LGGIDGLLHITDLAWRR VKHPSEVLEVQGEVEAKVLFQDQEKRQVSLGMQLGEDPWSGLTRRYPQGTRLFGKVSNLTDYGAFVEIEQGIEGL VHVSEMDWTNKNVHPSKVVQLGDEVEVMI EIDEGRRRIISLGMKQCANPWEFAANHNGDKISGAVKSITDFGV FVGLPGGIDGLVHLSLSDLSWESGEEAVRKYKKGEEVEAVVLAIDVEKERISLGKQLEGDPFGNFISVNDKGSLV GSVKSVDAKGAVIALSDEVEGYLPASEFAADRVEDLTTKLKEGDEVEAVIVTVDRKNRSIKLSVAKDAKESREAL NSVNAANANAGTTSLGDILLKAKLSEGEQ

119	1302	MTKSELMVRLEA VFAAKNGTHLLAKDVEYSVKVLVDTMTRS LARGQRIEIRGF GSFDLNHRPARIGRNPKTGERVE VPEKHVPHF KPGKELRERV DALKENAN
120	1313	MMSVT VETLENLERKVVLSPWSEINAETDKKLKQTQRRAKIDGF RPKAPLKMIAQMYGASAQNDVINELVQRRF YDVAVAQELKVAGFPRFEGVEEQDDKESFKVAAIFEVFPEVVGIDLSAQEVEKVTASVGDAEV DQTVEILRKQRTR FNHVEREARNGDRVIIDFEGKIDGEPFAGGASKNYAFVILGASQMLPEFEAGVVGKAGE SKDVTNF PEDYHGKDVA GKTAVFTITLNNVSEATLPEVDADFAKALGIA DGDVAKMREEVQKNVSREVERVNEQTKE SVMNALLKAVELKA PVALVNEEAARLANEMKQN FVNQGMADAANLDLPLDMFKEQAERRVSLGLILAKLVDENKLEPTEEQIKAVVANFA ESYEDPQEVIDWYADPSRLQAPTS LAVESNVVDFVILGKAKVNEKALSFDEV MGQA
121	1320	MQIILLEKIGGLGNLDIVTVKNGYARNFLIPAGKAKRAT EANMKEFEARRAELEAKQAEI LADARVRQE KLDGQTVTVAQKAGV DGRFLFGSVTNADIAAAIAVAGIEAVKANVRLPNGLKAVG EYEV EVA LHTDAVAKITVAVVAATE
122	1323	MRHYEIVFIVHPDQSEQV PAMVERYKTMIAEANGKIH RLEDWGRQ LAYPINKIHKAHYVLMNIETTPEVVEELET AFRFNDAILRHRLTIKTKHATVTEAS PMLGGEKAKNLLSGASEEAVAQ
123	1324	MSQHRKLIILGSGPAGYTA AVYAARANLPVIITGIAQGGQLMTTTEVDNWPADAGVQGP ELMARFLAHAERFGTEIIIFDQINA VDLQKR PFTLKGDMGEYTC DALIVATGASAKY LGPSEEEA FAGKGV SACATCDGFFYKNQDVAVVGG GNTAVEEALYLANIAKTVT LIHRRSEFRAEKIMIDKLMKRVEEGKII LKLESNLQEV LGDRGVNGALLKNN DGSE QIAVSGIFIAIGHKPN TDFKGQLEMDEAGYLKTKGGTADNVGATNIEGVWAAGDVKDHTYRQAITSAASGCQAA LDAERWLGSQNI
124	1328	MTDTAENQ TQNNWQAGHPRSIRSFVLROSHMTAAQORAIDTLWDSFGIDYQATPADLDARFGSSRPKILEIGFGMG TATAEIARRLPETDFLAIDVHGPVGVNLLKLIDENHLENIRVMRHD AVEV VENMLQDGS LDGIHIFFPDPWKKRH HKRRLIQAPFI A KLLPKLKTGGYIHLATDWE EYAQ QMLEV LSSFD SLQNTAADYAPTPD YR PETK FEAR GKRLGHG VV DVLVFKRIG
125	1339	MKA S QFFI STLKEA PAEA ALASHKLMIRAGL IKA NAGS LYTWMPMGLRVLRKVENV VREEMARAGS VELLMPVVQPAELWQESGRWEFYKGELLRLKDRHDRDFCMGPTCEEVIADIVRKEINSYKQLPKNFYHIQTKFRDEVPRPFGVMRA REFV MKDAYS F HADYASLQTTYQDMYDAYCRI FTRLGLA F RPVAADTGSIGGTGSHEFQVLAESGEDVIA YSDTSD YAANIELAPTLPLKGERAAQAE LVK VHTPNVKTIDS LVDL S IPIEKT LKSIVV EGENEGELI LLLL RGDHEFND IKA EKLAGVKSPLTMASPAAI VEQFGANGS LGPVG FAGK VYAD FATEK GADW VIGANEDDYH TGFNFGRDAAEP EFV DLRN VVEGDESPDGQGRKLARGIEVGHV FQLRDKY TQAMNVFSLDNNNGKSQIMEMG CYGIGITRVVAAAIEQ N NDEKG IWT KAMAPF EVVIVPMNYKKS DTVRE AADKIYAELLAAGDVL LDDR DERAGV LNDSELLG I PHRIVI GDRALKEGNVEY AERRDNEAQAVAIGEIVARV T ASLNA
126	1341	MSTQLHDVDPIETQEWLDALSSVLEYEGGERA QYLLEN LVK YCRDKGV RMPH GTTTPYLNTV S VEN EKG I PGDQNI EHRI R A F V RWNAA A I VLRAGKKD L E L G G H I A S F Q S A A T M Y E V G F N H F W K A K G E G E E G D L V F F Q G H V A P G I Y A R A F V E G R L T E D Q L N N F R Q E V D G H G L P S Y P H P L L P D F W Q P F T V S M G L G P I M A I Y Q A R F L K Y L E S R G L A K T K G R K V W C F C G D G E M D E P E S Q G A I A L A A R E G L D N L I F V I N C N L Q R L D G P V R G N G K I I Q E L E G N F A G A G W N V V K V I W G R R W D R L L A K D K D G I L R Q R M E E C L D G D Y Q T Y K S K D G A Y V R E H F F N T P E L K A L V A D D M T D E Q L W A L N R G G H D P Q K V Y N A Y D R A A H D G K P T V I L A K T I K G Y G M G A S G E G Q N V A H Q A K K M D K A S I L K Q F R D R F D I P V T D E Q I E S G D L P Y L T F A P D T E E Y K Y L H A R R D A L G G Y L P Q R K P T Q E V L E V P E L S A F D A Q L K S S G E R E F S T T M A F V R I L S T L L K D K K I G K R V V P I V P D E S R T F G M E G M F R Q Y G I W N P K G Q Q Y T P Q D K D Q L M F Y K E S V D G Q I I Q E G I N E P G A M A D W I A A A T Y S A N S F A M I P F Y I Y Y S M F G F Q R I G D L A W A A G D M H A R G F L L G G T A G R T T L N G E G L Q H E D G H S H I Q A D L I P N C V S Y D P T F Q Y E V A V I V Q D G L R R M Y A N N E D V F Y Y I T L M N E Y T H P D M P E G A E Q D I L K G M Y I L L K A G G K G D K K V Q L M G S G T I L Q E V I A G E L L K A D F G V E A D I W S C P S F N L L H R D A V E V E R F N R L H P L E A K V P F V T S Q L Q G H D G P V I A T D Y I R S Y A D R I R A Y I P N D Y H V L G T D G F G R S D S R A N L R R F F E V D R Y N V A V A A L A A L A E Q G K V S K E T V Q Q A I E K Y G I K A D S A P S W K R
127	1342	MSIVEIKV P D I G G H E N D I I A V E V K A G D T I A V D D T I L I T L E T D K A T M D V P A D A A G V V K E V K V K V G D K I S E G G V I L T V E T G A A A E A A P A A A E A Q P A P A A P A A A P A A A G G A T V Q V A V P D I G G H T D V D V I A E D D T I L I T L E T D K A T M D V P C T A A G V V K A V F L K V G D K V S E G S A I I E V E T V G S A A A P A Q A A Q A A P A A P P T A A A P A A P A P S A P A A A K I D E A A F A K A H A G P S A R K L A R E L G V D L G Q V K G T G L K G R I M G D D I K A F V K S V M Q G G A K P A A A S A S L G G G L D L L P W P K V D F S K F G N V E V K E L S R I K K I S G Q N L S R N V V I I P H V T V H E A D M T E L E E F R K Q L N K E W E R E G V K L S P L A F I I K A S V A L K A F P E F N A S L D G D N L V L K N Y F N I G F A A D T P N G L V V P V I K D V D Q K G L K Q I S Q E L T E L S K A R E G K L K P Q E M Q G A C F T I S S L G G I G G T G F T P I V N A P E V A I L G V C K S Q I K P V W N G K E F A P R L M C P L S L S F D H R V I D G A A G M R F T V F L A K L L K D F R R I T L
128	1343	MGNFLYRGIS C Q Q D E Q N N G Q L K P K G N K A E V A I R Y D G K F K Y D G K A T H G P S V K N A V Y A H Q I E T G L Y D G C Y I S T T D K E I A K K F A T S S G I E N G Y I Y V L N R D L F G Q Y S I F E Y E V E H P E N P N E K E V T I R A E D C C I P E E V I I A K E L I E I N
129	1344	MAL VELK V P D I G G H E N D I I A V E V N V G D T I A V D D T I L I T L E T D K A T M D V P A E V A G V V K E V K V K V G D K I S E G G L I V V V E A E G T A A A P K A E A A A P A Q E A P K A A A P A P Q A A Q F G G S A D A E Y D V V V L G G G P G G Y S A A F A A A D E G L K V A J V E R Y K T L G G V C L N V G C I P S K A L L H N A A V I D E V R H L A A N G I K Y P E P E L D I D M L R A Y K D G V V S R L T G G L A G M A K S R K V D V I Q G D G Q F L D P H H L E V S L T A G D A Y E Q A A P T G E K K I V A F K N C I I A A G S R V T K L P F I P E D P R I I D S S G A L A L K E V P G K L I I I G G G I I G L E M G T V Y S T L G S R L D V V E M M D G L M Q G A D R D L V K V W Q K Q N E Y R F D N I M V N T K T V A V E P K E D G V Y V T F E G A N A P K E P Q R Y D A V I V A A G R A P N G K L I S A E K A G V A V T D R G F I E V D K Q M R T N V P H I Y A I G D I V G Q P M L A H K A V H E G H V A A E N C A G H K A Y F D A R V I P G V A Y T S P E V A W V G E T E L S A K A S G R K I T K A N F P W A A S G R A I A N G C D N G F T K L I F D A E T G R I I G

		GGIVGPNGGDMIGEVCLAIEMCDAADIGKTIHPHPTLGESIGMAEVALGTCIDLPPQKKK
130	1347	MNPFLNTAFKAARRAGOMMIRAAGNLDANKTDKAFNDFVSDVDRNSEIILVEALKEAYPHHKITCEESGSHGKAA AEYEWIIDPLDGTTFNLHGPQYAI SMALLHKGVLQEALVYAPERNDVYMASRGKGALLNDRRIRVSNRIELNRCL IGTGFVVDQSMMDKYLAIIKDFLAKTAGGRREGAASLDLCAVATGRFDGFFEFNLKPWIDIAAGALIVQEAGGI DMSEDGWLESQDIVAANPKVLAQMLKIIISAHV
131	1356	MTQYTLKQASVLLQSKQISAVELASAYLAAIAEKNPALNGYITIDQDKTLAEARAADERIAQGNASALTGVPVAYK DIFCQTGWRSAACASKMLDNFISPYTATVVQNLLDEGMVTLGRTNMDEFAMGSTNENSFYGAAKNPWNLEHVPGGSS GGSAAVVAARLAPAALGSDTGGSIROQASHCGITGKPTYGTVSRCMVAYASSFDQTPGMAQTAEDCAIILNAMA GFDPKDSTSLEREKEDYTRDNLNQPLKGLKIGLPKEYFGEGRNSADVLTALQNTIDLLKAQGAELEIEVSLPQTKLSIP AYYVLASAEASTNLSRYDGVRYGHRAAQFADLEEMYKTRAEGFGSEVKRIMIGTYVLSHGYYDAYYLKAQKLRR LVADDQTAFARCDLILAPTAAPKIGADASPETYLSDIYTIAVNLAGLPALTPAGFSGGGLPVGVQLVGNY FAEAKILGAAHQIQLNSDHGKRPE
132	1358	MTWETVIGLEIHVQLNTKSIFSGASTAFGAEPNAHASVVECALPGVLPVNMREVVEKAIKLGLALDAKINQKNVF DRKNYFYPDLPKGYQISQQLDPLIVEHGLEIVVGDVKTINVTRAHMEEDAGKSVHEGLNGATGIDLNRAGTPLLE VVSEPEMRSAAEAVAYAKALHSLTVLWLDICDGDNMAEGSFRVDANVSRPKGQEEFGTRREIKNLSFRFLEQAINY EAAQIEILEDGGKVQQATMLFDPEKGETRVMRLKEDADHYRYFPDPDLPVIISDAQMOKAKAEMPELPKEMAAR FVADYGVSEYDARLITASRAQAAYFEEAAKESGQGKLTANWMNGELAALNKEGMELADSPITAPRLAALVGKIAD GTLSSKLAKKAFEAMWAEEPEATIAEIIEKHGLQOMTDTGEIEAMVDEVLANAKAVEQFKSGNEKALNAIVGQVMK ASKGKANPAQVQELIKAKLA
133	1372	MSNENRTCSFCGKSKSHVVKHLIEGENAFICDECVSNCIEILHEDGNDGTPSESAGGEPEESGKLPTPAEIVANLD HVIQEQAKKALAVSVYNYKRLRHPKAGANVELSKSNILLIGPTGSGKTLAQS LARKLDVDFVMADATTLEAG YVGEDVEQIITKLLGKCDFDVKEAQRGIVYIDEIDKISRKSNDNPSITRDVSGEVGVQQALLKLTGTVASVPPQGGR KHPNQEFINVDTTNIFCIGGAFAGLEKVRTEKGGIGFGASVHSKDENADITKLFGIVEPEDLIKGLIPELI GRLPVIATLELDEDALINILTEPKNALVKQYQALFGMENVELEFEAGRSIARQAMERKTGARGLRSIVERCLL DTMYRLPDLKGLKKVVVGKAVIEEGREPELVFES
134	1379	MTVKTIVYLDYATPPVDKRVAEKMPIYLTETFGNPASNHSFGWEAEEAVEKARADIAALINADSKEIVFTSGAT ESNNLAIKGAAHFYKSKGNHLITVKTENKAVLDTMRELERQGYEVTLVDQENGVLVDVLKAAIREDTILVSVMW VNNEIGVVQDIIPAIGEICRERKIIHVDAAQACGKVPDVAAKVDLMSMGHKVYGPKGIGALYVRRKPRVRLEA QMHHGGHERGFRSGTLPHTQIVGMGEAFRIAKEELAQDTAHLKLDRIFLKGIEGIEEVYINGDLEHRVPNNLNVS FNFVEGESLIMAVKELAVSSGSACTSASLEPSYVRLALGRNDELAHSSLRITFGRMTTEEVQFAEELIKSKIGKL RELSPLWEMFKDGDIDLNSIEWAHH
135	1390	MSSTPNKQAGYPRLVADIGGTNARFALETA PRVIEKAAVLPCDKYDVTDAVRAYLNQSGATAVRHAFAIANPIL GDWVQMTNHHWAFSIEETRQTLGLDTLILLNDFTAQALAVTQTSKDLMQGGQKPVEFAPKAVIGPGTGLGVSGL VHSHAGWVALAGEGGHTSFPPFDMEVLIWQAKNKYGHVSAERFLSGAGLSLVYEALAAKOKAKPAKLMPSITE KALSCASPLCRQTLIDFCAMLTGTVASNLAITLGARGGVYLGGIIPRVLEYFKTSPFRSRFENKGRFEAYLAAIPV YVVLSEFPGISGAAAALDNHLRNV
136	1392	MSTQTNFDLVLFGATGDLAMRKLLPCLYQAHVAGLLHPEGRILGVSRS ELDTEGFLAKVETSSKIHVKENFSDEAW ASFVERFAYLKVDVTQPDFAALGDLVKARKETDNVVIYLSTAPKFFAQACENLAAIGLNADNVRVLEKPLGTDL ASSQQINTDVARYFKEGQIYRIDHYLGKESLQNLALRNFANVMFEPWNNKYIESVQLTIAEQLGVEERGEFYDIT GALRDMVQNHLQMQLCMTAMEAPASLDADAVRDEKVVKVIKSLKPLTVESVNENVRGQYTAARGMNGYLEEINVPQ DSFTETYVAIAKAEIENERWKGVPFYLRGKRMAGKVAEIVLNFKDLNSHIFEGSRTAPNRLVIELQPYESVRLYTO MKTPGAGNKVETVPLATDLGKALEGRRAEAYERLLL DINGKLALFNRDDELA AWEYVMPILENWTNNTPPHGY GAHSGCPEAARELLARDGHKWHEEQ
137	1425	MSEONHPQTEPQLDENQIIALRREKLHNIRQQRNAYPNDFKRDFAADLHAQYGEIGKEELDPQGI PVKAVGRMML KRQMGKASFATI QDVSGQIQLYLNNGVSQEVLDFFNHWDLGDIVGAEGTLFKTNHGELTVRVSGIRLLSKSLRPL PDKHKGSLDQETKRYQRYVLDIANEESRNTFIKRSQI IQSVRNFMVGEHYLEVETPMMHPI PGGATAKPFVTHHNA LDIPLYLRIAPELYLKRLVVGGLERVFENRSFRNEGMSVRHNPEFTMIEFYEA FSDYERMMQMAEDIIRNASRTV NGTANITYNGKEVDLES PFERLTILEAIKKYNNPHYTDEQLNDAEWLKKEIVKHGESLPPSPGIGSLQALFEGCAE GKLWNPTFIVDYPVEVSPALARASDTKQGLTERFELFVVGRELANGYSELNDPDEQAFKAQVQKDA GDDEAMHY DADYIRAMEFGLPPTGGCIGIDRLVMLLTDQTIIRDVILFPQMRPE
138	1429	MRKKLTALVLSALPLAAVADVSLYGEIKAGVEGRNYQLQLEAQAA NGGASQVKVTKVTAKSRIRTKISDFGSF IGFKGSEDLGDLKAWQLEQDVSVAGGGATQWGNRESFIGLAGEFGTLRAGR VANQFDDASQADPWSNNDVAS QLGIFKRHDDMPVSVRYDSPEFSGFSGSVQFVPIQNSKSAYTPAYYTKNTNNNLTLP AVVGKPGSDVYYAGLNYK NGGFAGNYAFKYARHANVGRNAFELFLIGSGSDQAKGTDPLKNHQVHRLTGGYEEGGLNLALAAQDLSENGDKTK NSTTEIAATASYRFGNAVPRISYAHGFDFIERGKGENTSYDQIIAGV DYDFSKRTSAIVSGAWLKRNTGIGNYTO INAA SVGLRHKF
139	1445	MSDDKSKALAAALAQIEKSFKGKAIMKMDGSQQEENLEVISTGSLGLDIALGVGLPRGRIVEIFGPESSTGKTTLC LEAVAQCKNNGGVCAFVDAEHAFDPVYARKLGVKVEELYLSQPD TGEQALEICDTLVRSGGIDM VVVDSVAALVPK

		AIEEGDMGDHVGLQARLMSQALRKLTGHIKKTNTLUVFINQIRMKIGVMFGSPETTGGNALKFYSSVRLDIIRTGSIIKGEEVLGNETRVKVIKNVAPPFRQAEDFILYGEGLISWEGELIDIGVKNDIINKSGAWSYNGAKIGQGKDNVRVWLKENPEVANEIDAKIRALNGVEMHITEGTQDETGERPEE
140	1452	MQNIFDPLVIRGKSLTPIVQGGMVGVSASGLSSAVARENGIGTIASVDLRHLHEDLLAESAQINPSEEKYTSLNCTALDREIQKAKSASEGKGGLIAVNVMKAVKDHAAVYVRQACESGADAVVMGAGLPLDLPETEGYHKDVALLPILSESGINIVLKRWMKKGILPDAIVVEHPAHAAGHLGASTVEGVNDAKFDFKRVIEETFEVFKSLGLESEKIPLILAGGMANFEVKVTALKNWGASAVQIGTAFAVTEEGDAHNFKTLAGAETEKVVEFMSVAGLPARGVRTKFLDSYIKRESKLQTNAKADPRRCTQGLNCLTSCGLRDGLSKAGQFCIDIQLAAFRGEVDKGFFRGKDRCPSAMPSAPSARRYNIC
141	1457	MSQLANAIRFLSADAVQKANSGHGPAGPMGMAEMAETLWTKFLNHNPNPKFYNRDRFVLSNGHASMLLYSLLHLTYNLSIEDLKNFRQLHSKTPGHPEGYTDGVETTGPLGQGIANAVGMALAEKILAEEFNKDGNIIVDHYTYVFMGDGCLMEGVSHACSLAGTLGLGKLIVLYDDNNISIDGKVDGWFTENIPQRFESYGHVVPNVNGHDTAAIQAAIEAARAEKGKPSIICCKTLIGKGSSANKEGSHKTHGAPLGADEIEATRKHGLGWTYPAFETPQEYDAWNAKEQGAKLEADWNELFAQYQAKYPAEAAEFVRRMDKLPDNFDEYVQALKEVCAKAETIATRKASQNSIEILAKELPELVGGSADLTPSNLTDWNSNSVTRDKGGNYIHYGVREFGMGAIMNGLVLHGGVKPFATFLMFSEYERNALRMAALMKINPVVFVTHDSIGLGEDGPTHQPIEQATLRLIPNMDVWRPCDTAESLVAWAEEAVKAADHPSCLIFSRQNLKFQARSEQQLNDIKRGGYVISEAQGNAQAVIATGSEVELALEAQKALAAQNIARVVSMPSTNVFDRQDAAYQAAVLPEGLPRIAVEAGHADGWYKVYGLNGAVVGINRGESAPADLLFKAFGFTVDNVVDTVKSVL
142	1471	MSKKRVLVTGVTGPHLGNYVGAIARPRAAQNLDTESFLFLADYHGIICKHEPEMIIHQSTQAVAATWLACGLDPERTTFYRQSDTPEVMELNWLTCITAKGLMNRRAHYKAQANAENGQEDPDFGVEMLFSYPIMLTADILMFNANEVPVGRDQIQHVEMARDIAGRFNHRFREFTLPEVKIDENVELVGLDGRKMSKSYGNITIPIWENDKKTQKSVNKIITNMKEPGEPKQDSEPLFEIYKAFSTPSETVEFTKMLADGLAWGEAKKLLAAKINAELAEPRERYNELTADPSQIEEILQAGAAKARKEARELLDKVRDAVGIRPLK
143	1472	MYDKLTAKFQQALAEAQSLSALAADGSYLEAGFVLKALLDDQNSGAAALLAHAGVNVPQVKQRLQQHLSLPKVSGQGGDILPSRELQAVLNLMDKAATKRSDAYIASELFLALVQQNDATGKILKEAGATEQNINAAIDAVRGQVNDA NAEDQRDALKKYTLQARDGKLDPVIGRDEIRRAIQVLQRRTKNNPVLIGEPVGKTAIVEGLAQRIVGEV PESLRNKRLVLDLAALIAGAKYRGEFEERLKGVNLNDLAKDDGNTLIFIDEIHTLVGAGKTDGMDAGNMLKPALARGEHCIGATTLDDEYRQYIEKDAALERRFKVVLVGEPSVETDIAILRGLQERYEIHGIDITDPAVAAAELSDRYITDRFLPDKAIDLIDEAASRVKMEKETKPEAMDKIDRRLIQLRMKEAHVEKEKDDASKRLEIDEEINGLQKEYADLDEIWKAIAISDGAANIKKQIDEVKIKIEQAKRQGDLALASKLIMYEDLEHLEKQRAAAERADTDSTKPANKLLRNNVGAETIAEVVSRMTGIPVSKMMEGERDKLLKMEEVLHRRVVQGDEAVRAVSDAIRRSRSGLADPNKPYGSFLFLGPTVGKTELCKALAGFLFSEDLHLLRIMSEYMEKAHVARLIGAPPYGYEEGGYLTEQVRRKPYSVILLDEVEKAHDVFVNILLQVLDDGRLTDGQGRTVDKNTIVMTSNIQSGHQIQQMGIQDYEAVKEVVMEDVKEHFRPEMINRIDEVVVFHGLDQDNIRNIAKIQLKGLEKRLEQNLRLAVSDAALDIIAKAGFDPIYGARPLKRAIQSEIENPLAKALLAGNYAPESEIRVEADGDRLKFA
144	1506	MNLHQTVHEAAAFAAAGIADSPIVLQPTKNAEHGDFQINGVMGAAKAKQNPRELAKVAAEALADNAVIESAEVAGPGFINLRLRPEFLAQNIQTLNDARFGVAKTDKPTVVIDYSSPNLAKEMHVGLRSSIIGDSISRVLAFMGNTVIRQNHVGDWGQFQGMLVAYLVEQQKDNAAFLADLEQFYRAKVRDEDPAFADTAREYVVKLQGGDETVLALWKQFVDISLSHAQAVYDTLGLKLRPEDVAGESKYNDDLQPVVDDLVQKGLAEEDDGAKVVFLLDEFKNKEGEPAAFIVQKQGGGFYASTDLACLRYRIGRLKADRLLYVVDHQRALHFQLFTTSRKAGYLPEVGAIFIQFGTMMGKDGPFKTRSGDTVKLVDLLTEAVERATALVKEKNPELGADEAAKIGKTVGIGAVKYADLSKNRTSDYVFDWDAMLSFEGNTAPYLQYAYTRVQSVFRKAGEWDANAPTVLTEPLEKQIAAELLKFEDVLQSVADTAYPHYLAAYLYQIATLFSRFYEACPILKAEGASRNSRLQLAKLTGDTLKQGLDLLGIDVLDV
145	1518	MSQKLILVLNCGSSSLKGAVALDNGSGEVLLSCLAEKLNLPCDAYITFKVNKEHKVDSLHAPDHTGAVEALMEELKAHGLDSRIGAIGHRVVSGGELYSESILVDDDEVIAIGIEKCIPLAPLHNPAHLLGLRAAQSIFKGLPNVVFDTSFHQTMPEVAYKYAVPQELYEKYGLRRYGAHTGTSYRFVAETARFLGKDQKDLRMVIAHNGASITAVANGESRTSMGLTPLEGLVMGTRSGDIDPSVFGFLAENANMTIAQITEMLNKKSLLGIISGLSNDCRTIEEEAKGHGKAKLALDMFIYRLAKYIGMSAVAAGGLDALVFTGGIGENSDIIRERVIGYLGLGLNIDQEANLKARFGNAGVITTADSKAVAVVIPTNEELMIAHDTARLSQL
146	1533	MKAYLALISAASVIGLAACSQEPAAPAAEATPAAEAPASEAPAAEAPADAAEAPAGNCATVESNDNMQFNTKDIQVSKACKEFTITLKHGTQPKASMGNLVIKAEDMDGVFKDGVGAADTDYVVKPDDARVVAHTKLIGGGEASLTLDEPAKLADGEYKFFACTFPFGHGAALMNGKVTLD
147	1536	MLTNIAKKIFGSRNDRLLKQYRKSVARINALEEQMQLSDADLQAKTAEFKQRLADGQTLGILPEAFAVCREASRRTLGMRHFVDQLIGGMVLHDGKIAEMRTGEGKTLVATLAVYLNALAGKGHVVTVDYLASRDAGIMEPLYNFLGTTVGVISDMQPFDRQNAAYADITYGTNEFGFDYLDRDNMVTDQYDKVQRELNFAVVDEVDSILIDEARTPLIISQADDNQIQLYQIMNTVPPHLVRQETEEGEGDYWVDEKAHQVILSEAGHEHAEQILTQMGLLAENDSLYSAAANIALMHHLMAALRAHSLFHKDQHYVIQDGEIVIVEDEFTGRLMSGRWRSEGLHQAVEAKEGVEIKRENQTLASITFQNYFRLYTKLSGMDTADTEAEFQSIYNLETVIIPTRNPVQRKDFNDQIFRSAEAKFEAVVKDIEECHKRGQPVLVGTTSIENSELVSKLLTQAGLPRNVLNKEHEREALIVAQAGKVGAIITVATNMAGRGTIDIVLGGNLKHQTDIADETSLDEEKQAOQIAALEDGWQAEHKVMEAGGLHIIIGTERHESRIRDNQLRGRSGRQGDGPSSRFYLSFEDPLRLFALDRAAII

		LNRLAPERGVAIEHNLTRQIEGAQRKVEGRNFDMRKQVLEYDDVANEQRKVIIYSQRNEILTSKDISDLQEIERSDVSDLVDTYMPDSMEEQWDIPTLENRLAEEFRLHEDIQSWLKADNAIDGQDIKERLIERIENEYAAKTELVGKQAMADFERNVMLQVIDNQWREHLAAMDYLROGIHLRSYAQKNPKQEYKREAFTMFQDLWNGIKFHIASSLTSQIEQNPVAVVVEQPIGNIQSIHSESPDMEEELLGQSQTDLVTAEFNPDGTDFSPEALEARGQIVHNRDPCPCGSGLKYKQCHGKLA
148	1560	MLNKDQFADNHFIRTIIEEDLESKGHTAVQTRFPPEPGNLYHIGAKSICLNFGLAYIYDGLCNLRFDTNPEKENDEYVNAIKEDVEWLGFHWAGEPRFASNYFDQLYDYAVGLIKDGKAYVDDLTPEEMREYRGTLTEAGKNSPYDRSVEENLDLFLTRMKNGEPFDGSKTLRLKIDMASGNINMRDPVIYRIRRAHHHTGDKWCYIYPMYDYTHCISDAEGITHSLCTLEFEAHRLPLYDCVLNDNIPAPHATRPRQYEFSRLELLYTITSKRLNOLVVEKHVGWDDPRMPTISGMRRGYTPEGLRLFAKRAGISKSENIVDMSVLEGAIREELENSAPRLMAVLNPLKVTITNFETGRTQSRRAAFHPNHEEMGEREVPIQSTIYIEADDFAENPPKGFKRLIPGGEVRLRHGYVIKCDDEVVKDEAGNVVELKSIDHDTLGKNPEGRKVKGVIHWVSAEHAEEIKVRLYDRLFTVERPDAVRGEDGEYLPFTDFLNPESVKEITAYEPAAKDLPAESRWQFERIYFVTDRKDGHKDTPVFNRTVTLKDSWQPK
149	1572	MLEAYRKAAAERAALGIPALPLNAQQTADLVELLKSPPAGEGEFLVELLAHRVPPGVDDAAKVKASFLAAVAEGSASSPLISPEYATELLGTMGGYNIHALIELLDDDKLASIAAKGLKHTLLMFDSFHDVQEKAEKGNKYAQEVQLQSWADAEWFASRAKVEPEKITVTVFVVDGETNTDDLSAPDAWSRPDIPLHALAMLKNPRDGTIPDKPGEVGPIKLLLEELKAKGHPVAYGVGVGTGSSRKSATNSVIWHTGEDIIPFVNPKNRFGGVCLGGKIAPIFFNTQEDSGALPIEVDSALKMDVVDILPYEGKIVKNGETVVAEFLKSQVLLDEVQAGGRINLIIGRLTAKAREALKLPASTAFRLPQAPAESKAGFTLAQKMVGRACGLPEGQGVRPGTYCEPRMTTVGSQDTTGPMTDELKDLACLGFSAADMVMQSFCHTAAPKPVDVKTHKELPAFISTRGGVSLRPGDGVIHSWLNRLLPDTGTTGDSHTRFPIGISFPAGSGLVAFAAATGVMPDMPESVLVRFSGKLQPGVTLRDLVNAIPLYAIKQGLLTVAKACKKNIFSGRILEIEGLPDLKVEQAFELTDASAERSAACCTVKLNKEPIIYEYMSNVLMKNMIANGYQDPRTLERRIKAMEKWLANKLPELLEADKADEYAAVIEINMDDIKEPIIACPNDPDDVCFMSERSGTKIDEFIGSCMTNIGHFRAASKLLEGKADTPVRLWIAPPTKMDAKQLSDEGHYGVLGRAARMEMPGCSCLMGNQAQVREGATVMSSTRNFPNRLGKNTFVYLGSAELAACSKLGKIPPTVEEYQANIGIINEQGDKIYRNMNEIDSYNEVAETVNV
150	1574	MQVYYDKDADLSLIKGTKTVAIIGYGSQGHABAANLKDGVNNVIGLRQGSSWKKAAEAAAGHVVKTVAEATKEADVMLLLPDETMMPAVYHAEVTANLKEGATLAFAHGFNVHYNQIVPRALDVMVAPKGPGHTVRSEYKRGGVPSLIAVYQDNNSGAKDIALSYAAANGGTKGVIETTFREETETDLFGEQAVLCGGVVELIKAGFETLTEAGYAPEMAYFECLHEMKLIVDYLFEGGIANMNSISNNAEYGEYVTGPEVNASSKEAMRNALKRIQTGEYAKMFQEGNVNYASMTARRLNADHQVEKVGQLRAMPWPITANKLVDQDKN
151	1577	MQLSGAQIIVQSLKAEGVEYVFGPGAVIEIYDALFQLNKFHKILTRHEQAAVHAADAYARVSGKVGVALVTSGPGVTNALTGIATAYTDSIPMVISQGVGNSLIGTDAFQEVDTVGITRPCVKHNPLVTDINELAETIKAFQIAASGRPGPVVVDVKDVTQAMAKFSYPQEDIIFRSYQPVVQHIGQIKKAVQMLASAKRPVVYFGGGVVLGNASEELTRFRV RMTGAPCTGTLMLGLAYPSGDRQFLGMLGMHTYEANLAMQNADVVLAVGARFDDRRVSVPSKFFEAKKVIIDVDPSSIAKRVKVDIPIVGDVKNVLSEMAWQKQESVPSEDALGKWWKTIEEWRSRDCLWFNDGSEIIKPQVVIQKLAEITGNSAITSDVQHQMFQAQYYPFERPRQWLNSGGLGTMGVGLPYAIGAKLAAPDQDVFCITGDGSIQMNIEQESTCFQYRIPVNVTLNNGYLGMRQWEIYYGGRESETYFDSSLPDFVKLAEAYGHIGIRVDKKSVDGEALLEALNOKDRLVFIIDFLTDQKQNVMPMVNGKGLDEMLVPPHMRADGKA
152	1581	MMKLNTQSPDFQAGLKALLAFETAQNPETERIVADICAVQKRGDAALIEYTNKFDQTNAKSIDDLILITQADLNAAFERIPNDVQTAQTAARRVESYHQRQKMEWSYTDQEDFTLLGQOITPLDRVGIVYVPGGKAAYPSSVIMNAMPAHVA GVKEIIMVVPPTKGERNDIVLAAAYVAGVTKVFVGGQAVALAYGTETIPQVDKITGPGRNAFVAAKRRVFGVVGIDMVAGPSEILVIADGTPADWVAMDLFSQAEHDEIAQALILIGTSQAYLDEVEAAMDRLIETMPRRDIIEASLNRGAMILAKDLDEACEIANYISPEHLELSVENPQEWAKKIRHAGAIFMGRTGESLGDYCAGPNHVLPSTSRTARESSPLGTYDFQKRSSLIQVSEQGAQKLGETAVSVAHGESLTAHARAEEFRMK
153	1583	MNLTKTQRQLHNFLTLAQEAGSLSKLAKLCGYRTPVALYKLKQRLKQAEQDPMARGIRPSLMAKLEKHTGKPKGWLDRKHRERTVPTAAESTGTAETQIAETASAAGCRSVTVNRNTCTQITVSINLDGSGKSRLDTGVFLEHMIQIARHGMIDIDISCKGDLHIDDHHTAEDIGITLGQAIQALGDKKGIRRIGHSYVPLDEALSRVVIDLSGRPLGVNIEFTRALIGRFVDLFEFFHGIVNHSMMLHIDNLSGKNAHHQAEFTVKAFGRALRMAVEHDPRMAGQTPSTKGTLTA
154	1595	MKTSELRQKELKFFETKGHTVVRSSSLVPHDDPTLILFTNAGMNQFKDVFLGFDKRPYSRATTAQKCVRAGGKHNDLENVGYTARHHTFFEMMGNFSGDGYFKRDAIHFAWEFLTSPPEWLNPDKLILATVYAEDEAYNIWLNEIGMPSERIVRIGDNKGAKYASDNFWQMGDTGPCGPCSEIFYDHGEEIWGGIPGSPEEDGDRWIEIWCNCFMQFNDRDEQGNMNPPLPKPSVDTGMLGLERIAAVMQHVHSNEYIDLFQDLLKAVARETGAPFRMEEPSLKVIADHRSCLFLIADGVLPNEGRGYVLRRITRAVRHGYKLQSKPFFHKLADLVKEMGGAYPELKEKQAOQIEEALKNEESRFAQTLETGMALLEALVKGKGTLGEEIFKLYDTYGFPLYDILTADICRERNIEPDEAGFEREMEAQRARARAQSFKANAQLPYDQDTEFKGYSERQTESKVLALYKDGEQVNLNEGDSGAVVIDFTPFYAESGGQVGDVGYIFSGENRFEVRDTQKIAAVFGQFGVQTSGRLKVGDSVTAKVDEIRNANMRNHSATHLMHKALRDVLGRHVEQKGSVTAESTRFDISHPQAVTAEEIAEVERRVNEALLANVAVNAIMSMEDAQTKGAMMLFGEKYGEEVRLQMGFGFSTELCGGTHVSRTGIDLFKIISEGGIAAGVRRIEATGLNALKWAQEQLVKDIAETKAQTEKDVLAQKIAQAGAAHAKALEKELARAKAELAVHAGAKL

		LDDAKDLGAALKVAAQIEADAAALREIVTDLTGKSDNAVILLA AVNDGKVSICAGVSKPLTGKVAGDLVKFAAEQ VGGKGGRPDLAQAGGTADKLPAVLDSDKDVGAKLV
155	1604	MELVFIHGQSEWNAKNLFTGWRDVKLSEQGLAEAAAAGKKLKENGYEF DIAFTSVLTRAIKTCNIVLEESDQLFV PQIKTWRNLNERHYGQLQGLDKKQTAEQYQGDEQVRIWRRSYDTLPLLDKDEFSAHKDRRYAHLPADVVPDGENLK VTLERLVLPFWEDQIAPAI LSGKRVLVAAHGNSLRALAKHIEGISDEDIMLEIPTGQPLVYKLDNLKVIEKFYL
156	1621	MGIYDFQMKDAEGNAVDLSGYRGKVLLIVNTATRCGLTPQYEALQKLYAQYTAEGLEILDPCNQFREQAPESSGE IAQVCMKFGTKFKIFDKIEVNGANTAPLYAYLKSVPQDKGNHLFKDFVLKLAALGEKRDEGDIKWNFTKFLVNR DGEVVERFAPSVTPEEIEADIRALL
157	1636	LLFSSLLFSSLLFSSAAQASEDSSRSPYYVQADLAYAAERITHDYPKPTGTDKD KISTVSDYFRNIRAH S YHPRVSVGYDFGGWRIAADYAS YRKWNNNKYSVNICKGREQDNREELKTE NQENG SFHAASSLGLSAIYDFKLND KFDKFKPYI GARVAYGHVKHQVHSVETKTTIVSKPAATSPQGGPIIET
158	1640	MSLYPIYNFSAGPAVLPEAVLETARQEMLDYNGTGFPMAMSHRSEMFSLISLHAEQDLRQLLKVPDNYKILFLQG GATTQFNMAAMNLAHGFR TADAVVTGNWSRIAYEOMSRSLTDTEIRLAAHGGEOF DYLDDLPVETWDVAPDSAFVHF AVNETVNGLQYREVPC LSEGMPPLVCDMSSEILSREFDVADYGLIYAGAQKNIGPAGVTVVIVREDLLERCPNDIP DVFNRYRSHINRDGMYNTPTSYAIYMSGIVFRLQAOQGGVKKIEAVNRLKAQTLYETIDGSDGFYINRIRPNARSKM NVVFTGDEELDRRFVLEALQGLCLIKGYKT VGGMRASIYNAMPLEGVRALADFM RDFQRRY G
159	1642	MSREMLQLAEALASEKNDAEVVFQALEFALSTA KKKADREHM DV RVQINRDTGEYQTFRRWLIVADED YTPDV EKTIEEIQEEIPGTTIQIGEYYEEQLPNEGFGRQAAQTAQQTII LQRI RDAEREQNLNEFLAVKEDIVSGTVKRVER HGIIVEVVA GKL DALI PRDQMI PRENFRSGDRIRALFLRVEEIGNTGRKQVILSRTSGDFLVKLYANEVPEIADGM LEIRAVARDPGQR AKA VAKANDQ RIDPQGTCIGVRGSRVNAVSNELSGERIDVVLWSPEPAQFVMSAL SPAEV S RIVEDEKHADVDVVAEDQ LALI AGRGGQNVRLASLTGQ L NIMTS AEADE R NAAED A I RRL FMDH L N VDEETADV LVQEGFATLEEVAYVPAE ALLAIEGFDEEIVDMLRN RARDAIL TMAIAAEEKLGEV SDDMRNLEGIDADM L RSLAE AGITTRDDLAELA VDELIEITGVNEETAKAVILTAREHWFTEDK
160	1655	MVHIMFNQAAQELTTIRDLRFAVSRFN EA GLFFGHGT D NAHDEA AYL L I LHTLNLPDMLAPYLDALKL EAEKEEV LAVIERRAVEH I PAAYLTHQAWQGEFDYV D E RVI I PRSF YI ELLGDGLRPWIEYD E LVHNA LDLC TGS GCLAIQM AHYPDAQIDAVDVSLDALE VAGIN VEDYGLEERIRL I HDTL FEGLEG TYD LIVSNPPYVDAE S VELLPEEYLHEP ELALGSGADGL DATRQ ILLNAAKFLNPKGVLLV EIGHNRDVLEAAYPELPFTWLETSGGDGFVFLLTREQLLGE E
161	1684	MLDIQLLRSNTAAVAERLARRGYDFDTARFDLEERRKSVQVKT EELQASRNSISKQI GALKGQGKHEEAQAMNQ VAQIKTDLQAAADLDAVQKELDAWLLSIPNLPHE SVPAGKDETENVEVRKVGT PREFDFEIKDHDV DLGEPLGLDF EGGAKL S GARTV M RQI ARLH RAL A QFM D THTLQHGYTEHYTPYIVDDTTLQGTGQLPKFAE DLFHVTRGGDET KTTQYLIPTA E VTLNTVADSIIPSEQPLKLTAHSPCFRSEAGSYGKDTRGLIRQHQFDK VEMVQIVHPEKSYET LEEMVGHAE N I KALELPYR VITLCTGDMGF GA KTYDLEVVWPAQNTYREI SCSNCEDFQARRLKARFKDENGK NRLVHTLNGSGLAVGRTLVAVLENHQNADGSINIPAA LQPYMGGVAKLEV K
162	1691	MARHVWQAGRFEIGLDKPKIMGIVNLT PDSFS DGGVY S QNA QTALAHAEQ L I KEGAD I D I G GESTRSGAD YV S PEEWARVEPVIAEVAGWGVPISLDTRRTVIMEKALALGGIDIINDVAALNDEGAVELLARQADTGICLHMQGLPKT M QI NP K YQDV VGEVARYLKARSAE C I AAGIAPQRII LD PFGSGFGKPLQH N I ALMRHLPELMAETGF PILLIGVSR KSTIGELTGEANAAERVHG S VAA ALASVARGAQIVRVHDVKATADALKVWEALGINL
163	1710	MTDLNLTFLANLKQRNPNQEPFHQAVEEVFMSLDPFLAKNPKYTQ SLLERIVEPERVVMFRV TWQDDKGQVQVN RG YRVQMSAIGPYKGGLRFHPTD LGV LKFLAF EQVFKNALTTLPMGGKGGSDFDPKGKSDAEVMR F CQAFMTE LY RHIGADTDV PAGD IGVGGREI GYLFQYKKIRNEFSSVLTGKLEWGGSLI RPEATGYGCVYFAQAM L QTRNDSFE GKRVLISGSGNVAQYAAEKA IQLGAKVLT VSDSNGFVLFPDSGMTEA QLA ALI E LKEVR RERV ATYAKEQGLQYFE KQKPGVAAE I ALPCATQNE LDEEAAK TLLANGCYVVAEGANM P STLG AVEQFI KAGI LYAPGKASNAGG VATS GL EMSQNAIRLSW TREEVDQRLFGIMQSIHESCLKYKG DTVN VNGANIA G FVKVADAMLAQGF
164	1716	MAFYAFKAMAAA ALAVALV LSSCGKGGDAAQGGQPAGREAPAPVVG VVTVHPQTV ALTV ELPGRLES I RTADVR AQVGGIIQKRLFQEGSYVRAGQPLYQIDSSTYEAGLESARAQ LATAQATLAKADALIARYKPLVAAEAVSRQ EYDA AVTAKRS AEGVKA AQA A IKSAGISLNR S RITAPISGFIGQSKVSEGTLNAGDATV LATI RQTNPMYVNTQ S AS EVMKLRRQIAEGKLLA DGVIAVGKIFDDGTVYPEKGRLFADPAVNESTGQITLRAAVPNDQNI LMPGLYVRVLM DQVAVD NAFVVPQ QAVTRGAKDTVMIVNAQGGM EPREVTV AQQ QGTNIVT SGLKDGDKV VVEG I S IAGITGAKK VTPKEWASSENQAAAPQSGVQTASEAKPASEAK
165	1796	MIMAKKISILVGS L R R A S F A R K V A L N A A E M F P E G W Q A E I V E I G H L P L Y N F D Y D D P A V E D V P L P E S Y T A F R E T I K A S D G I L F V T S E N N R T I P A C L K N A V D I G S K P N A D V A W K N K P A G I I S H S V G K M G G Y S S Q K N L R L A L S Y F D M P V T G Q P E V F LGNSPTLFDENGKLIDSARDFVQSYI NQFVGLIERNAK
166	1809	MNNLIKINLLPYREEMNKRKQQQFKTLMYGA VLTGVA A AATYL FIDNMINNQSERNTLLETSIAHLDTE LSEI QK LKQEKAFLIKKNKIEELQKRLQAAK I L D S L N E A V P G S T Y L T S L D A V T A D S Y R L S G R T S S D N R V A A M M R A M P N T G I F K Q P E L L S I K K N N S H Q E F T L Q A T L Q P I V K A A E S K E N P A S G N A Q E A N
167	1810	MASKSSKTNLDNNIHLNLPARLFI ALLAVA A V L G L G Y A G L F K S Q M E S L E E Y E A K E T E L K N T Y K Q K S I D A A S L N N LR D E L A S I R S A F D I M L K Q L P T D A E I P N L V Q E L H Q A G S S N G L R L D S V M P Q P P V D G P I K R L P Y S I S I T G N Y E Q I S Q F

		TRDVGSLSRITLESLKIAQSPENGGNPDKSSILNLSSAIATTYQAKSVEELAAEAAQNAEOK
168	1811	MKHYALLISFLALSACSGQSEDLNEMWAQTRREAKAEIIPFQAPLTPVAPVSYPPQITGPNAFDFRMETDKKGENAPDTKRIKETLEKFSLENMRYVGILKGQKVSGFIEAEGYVYTVGVGNLYGQNYGRIESITDDSIVLNEIEDSTGNWVSRKAELLNNSDKNTEQAAAPAAEQN
169	1812	MNTKLTKIISGLFVATAAFQATASAGNITDIKVSSLNPKQ1VKVSDKE1VNPTGFVTSSPARIALDFEQTGISMDSQVLEYADPLSKISAAQNSSRARLVLNLNPKGQYNTVEVRGNKWI FINESDDTVSAPARPAVKAAPAAPAKQQAAPSTKSASVSEPFPAKQQAAPFTESVVSAPFSPAKQQAASAKQQAAPAKQQAAPAKQQAAPAKQTAIDFRKDGNAGIIELAALGFAGQPDISQQHDHIIVTLNKHTLPTTLQRSLDVADEFKTPVQVTLKRLNNNDTQLIITTAGNWELVNSKAAPGIFTQVLPKKQNLIESGGVNNAPKFTGRKISLDFQDVEIRTLQILAKESGMNIVASDSVNGKMTLSLKDVPWDQALDLMQARNLDMRQQGNIVNIAPRDELLAKDALLQAEKDIADLGALYSQNFQLKYNVEFRSILRLDNDATTGNRNTLISGRGSVLIIDPATNTLIVTDTRSVIEKFRKLIDELDVPAQQVMIEARIVEADGFSRD LGVKGATGKKLKNDTSAGWGKVNSGFGDDKWAETKINLPITAAANSISLVRASISSLNLELSASESLSKTKTLANPRVLTQNRKEAKIESGYEIPFTVTSIANGSSTNTTELKAVLGLTVTPNITPDQIIMTVKINKDSPAQCASGNQTIILCISTKLNNTQAMVENGGTLIVGGIYEEDNGNTLKVPLLDIPVIGNLFKTRGKTDRELLIFITPRIMGTAGNSLRY
170	1835	MSVIQDLQSRLIAQTTDIEALDALLNEQKIALYCGFDPTADSLHIGHLLPVIALRRFQOAGHTPIALVGGATGMI GDPSFKAAERSLNSAETVAGWVESIRNQLTPFLSFEGGNAIMANNADWFGSMNCLDFLRDIGKHFVSNAMLNKESVKQRIIDRGAGISFTEFAYSSLQGYDFAELNKRHGALEIGGSDQWGNITAGIDLTRRLHQKVFGTLPLVTKSDGTFKGKTEGGAVWLNNAKKTSPYQFYQFWLKVADADVYKFLKYFTFLSIEEIDAIEAKDKASGSKPEAORILAEEMTRLIHGEELAAAQRISESLFAEDQSSLTESDFEQLALDGLPAFEVSDGINVVEALVKTGLASSNKEARGFVNSKAVLLNGKPAEANNPNHAAERPDDACLLNGEHKRGKYTILRRGKRNHALLVWK
171	1838	MSLKCGIVGLPNVGKSTLFNALTQSGIEAANYPFCTIEPNVGIVEVPDPRMAELAKIVNPQKMQPAIVEFVDIAGLVAGASKGEGLGNQFLANIETDAIVNVVRCFDDDNIVHVAGRVDPIADIETIGTELADLASVEKAIVREEKRARSGDKDAQKLVLCKLPHLDEGKPVRSFGLDAEERAMLKPLFLTAKPAMYGVNAEDGFENNPHLDRLKELAAKENAPVVAVCAAMESEIAELEDDEKAELFLAEMGLEEPGLNRLIRAGYDLLGLQTYFTAGVKEVRAWTIHKGDTAPQAAGVIHTDFERGFIRAQVISYDDFVSLGGEAKAKEAGKMRVEGKEYVVQDGDMHFLFNV
172	1843	MPTQSCHKASINIGLIQAREALMTQFRPILNQANITDQWRIIRLLAENGTLDFQDLANQACILRPSLTGILTRLEKAGLVVRLKPSNDQRRVFLKLTAEGEKLYYEIGEEVDERYDAIEEVLGREKMLLKDLLAELAKIEDALNS
173	1849	MSTPALLVLADGSVFHGTISIGYEGSTSGETVNTSMTGYQEILTDPSCQKIVTLYPHIGNTGNAEDEESRSVYAAGLIIRDPLLLHSNFRASESLHDYLVRNKTVAIADIDTRRLTLLREKGAQGGAILTGADATIEKAQELIAAFGSMVGKDLAKEVSCETEYEWTEGEWALGKGVTPDEQPYHVVAYDFGVTKNIRMLASRCRITVVPQAQTSADEVLALNPDGVFLSNGPGDPEPCTYAIKAVQKIESGKPIFGICLGHQLIISLAIGAKTLKMRFSHHGANHPVQDLSGKVITTSQNHGFADADTL PANARITHKSLFDNTLQGIELTDKPVFCFQGHPEASPGPQDVGYLFDKFIGNMKAAKRA
174	1854	MSIPINFNNLKYLLNDMRNKNRIIEAFFPNYNQRQYAVILTRYKDEPRPDDYQAKLEFFNLSSENSIFAYADFYEVHFKSATDFINFFKINVQAGAAKIREI FQSFSNLFADFIPTQKLDI1YKKIVATRLEPNSPNTIYCYDVRRNGKDKAGKPNRRS VENSEKAKILRP ELYEKFKA DSNSYSSFFSDNPSDEKTDAAEIIREVTNRQ
175	1855	MPKRTDLKSILIIGAGPIVIGQACEFDYSGAQACKALREEGYKVLVNSNPATIMTDPEADVTYIEPIMWQTVEKIIAKERPDAILPTMGGQTAALNCALDLARNGVLAKYNVELIGATEDAIDKAEDRGRFKEAMEKIGLSCPKSFVCHTMNEALAAQEQVGFPTLIRPSFTMGGGGIAYNKEFLAICERGFADSPTHELLIEQSVLGWKEYEMEVVRDKNDNCIIICSIENFDPMGVHTGDSITVAPAQTLTDKEYQIMRNASLAVLREIGVDTGGSNVQFAVN PANGEMIVIEMNPRVSRSSALASKATGFPIAKVAAKLAVGFTLDELRNNDITGGKTPASFEPISDYVVTKIPRFAFEKFPAADDRLTTQMKSVGEVMAMGRTIQUESFQOKALRGLETGLCGFNPRS EDAEIRRELANPGPERMLFVADAFRAGFTLEEIHEICAIDPWFLAQIEDLMKEEKAVSDGILSDLDFAALRRLKRKGFSKRLAQLNVSEKEVREHRYALKLHPVYKRVDTCAAFA TETAYLYSTYEECESRPSDRKKVMI LGGGPNRIGQGIEFDYCCVHAALALRESGFETIMVNCNPETVSTDFTDS RLYFEPLTLEDVLEIVRTENPWGVIVHYYGQTPLKLANALVENGVNIIGTSADSIDAEE DRERFQKVNLGLRQP PNRIAHNEEEALVKAEEIGYPLVVRPSYVLGGRAMQVVSAAELOQYMR EAVQVSEDSPVLLDFFLNNAIIEVDVDCVSDGKDVVIGGIMQHVEQAGIHSGDSGCSLPPYSLSEEI QDIEIRRQTKAMAYALGVVGLMNQFAVQDGVVFLEVNPRA SRTVFPVSKATGVPLAKVGARC MAGISLKEQGV EKEVVPDFYAVKEAVPFIKFPGVDTILGPEMRSTGEVMGVGASFGEA YKAQLGAGERLNPTGK1FLSVREEDKERVIKTAKNFQV LGY GICATRGT A QYLTEHGLIVQTINKVPEGRPHIGDALKNGEIALVVNTVSSDPQSVD SHIIRQSALQ QRV PQYTTAGGEAMSEGAKSRDH LGVY SVQELH GRLKNRN
176	1859	MDISDFDFTLPEK LIAOH PPEVRGSSRLLVALPDMPQDRVFGDLPDYVEAGDVLVFNNTKVMKARLFGQKDSSGRIEALIERVLDNHTALAHIRSSKSPKPGMGLV FEGGI RAVT VGRG EELFCLRFEGGETVYELLEQNGHLP LPPYIERAADADDDSRYQTVYAKYQGAVAAPTAGLHFT ELLHRLKDKGAVTAEVTLHVGAGTFQPVVDKIEEHKMHSEWFEVPSETAAAVEAAKARGNKVWAVGTTSMRALES AARATGRLKAGQGD TDFITPGYRFNV DRLVTFHLPKSTLLMLVSAFSGMGHIRAAYRHAVEREYRFFSYG DAMV LGRNEGVVR
177	1861	MLKKVLIANRGEIALRVLRA CREMGIATVAVHSEADKDSLHVKLAD E SVCIGPAASQSYLNPV AIIAAEVSCADAVHPGYGFLAENADFAEQVEQSGFTFIGPKPDTIRLMGDKVSAKHAMIAAGVPCVPGSDGALPDDGEEILKIADKV

		GYPVIIKASGGGGGRGMRVVEKKEDLLQSVEMTKAEAGAAFGNPMVYMERLYQPRHVEIQLVIADEGNATYLAERDCSLQRRHQVIEEAPAPFITEKERAKIGNACADACKRIGYRGAGTFEFLYEDGEFFFIEMNTRVQVEHPTELITGVDIVQEQLRIAAGLPLQYKQKDIQVEGHAFECRINAEDPYNFI PSPGLIESCHLPGGGFGIRVDSHIYQGYRIPPY YDSLIGKICVHGKTREQAMAKMRVALAELAVTGKTNPLHRLFADAGFQKGGVSIHYLEHWLEDRKAKQDK
178	1862	MPYQQITVNNDAVAERLADALMEHGAWSAAIEDAYAGTQNEQAI FGEPEGMPEAQIWIQOSKVIALFGEHDEAAAI QTATQECGLKDLAYTGETIEDQDWVRLTQSQFDPIRISDRLWITPSWHEPEGSAVNRLDPGLAFGTGSHPTTRL CLKWLDTQLKNGESVLDYCGCGSILTIAALKLGAGFAGVGDIDEAQVRAKGKDAAQNNVDAQFFLPDGLPQGQFDVVVANILANPLRMLGEMLAARTKQGGRIVLSSLLDEQAEELGGIYSQWFQDLPDAETEEGWARLSGVKR
179	1864	MNRNEILFDRAKAIIPGGVNNSPVRAGFSGVGGVPRFIKKAEAGAYVWDENGTRYTDYVGWSGPAAVGHAHPEVETVC EAALGGLSFGAPTEGEIVIAEEIAKIMPSVERLRVLSGGTEATMTAIRLARGFTGRDKIIKFEFCYHGHSDSLLVK AGSGLLTFGNPSSAGVPADFTKHTLVLEYNNIAQLEEAFAQSGNEIACVIVEFVGVMNLVRPTEAFVKALRGLTE KYGAVLIYDEVMTGFRVALGGAQSLHGTPLDTTMGVIGGGMPLAAGFGRKDIMECISPLGGVYQAGTLSGNPIA VAAGLKTLEI IQREGFYENLTARTEQLVQCFRTAADAAGIEFTADSVGGMFGLYFAAHAPRNYADMARSNIEGFKQ FFHGMLDRNVAFGPSAYEAGFVSAHTPELIDETVAVAVEVFKAMAE
180	1903	MTLAEFWPLCLRRLHDMLPQGQFAQWIAPLTVGEEGGVVVYGNQFACNMLKSQFAGKIEAVREELAAGRSAFVF KPGEGVRYEMAAVEGAVEPAEPISLHAVSEGMPVQEVLIDELPSEEVKPAASKTAAIDLARERMKNLPHEPQAAGS ASRPESVAVAKARTDVQRDAEEARYEQTNLSPDYTFDTLVEKGKNRLAAAAAQAAEASPGQSYNPFFLYGSTGLK THLVQAVGNELLKNRPDAKVRYMHSDDYIIRSFMKAVRNNTYDVFQOQYKQYDILLIIDDIOFIKGKDRTMEEFFYLY NHFHNEKKQLIITCDVLPACKEGMDDRLLKSRSFWGLTLEPPELEMRIAILQKKAEEAGISIEDEAALFIANLIR SNVRELEGAFNRRVGASSRFMNRPVIDIDLARTALQDIIIAEKHKVITADIIIDAVAKYYRIKISDVLGKKRTRNIAR PRQVAMSLTKELETLSSLPSIGDSFGGRDHITVMHGIRAVAKLREEDPELAQDYEKLLLILION
181	1920	MTQDKILILDFGSQVTQLIARRVREAHVYCELHSFDMPLDEIKAFCNPKGIIISGGPNVSYESDYQADTGIFDLGIP VLGICYGMQFMAHHLGGEVQPGNQREFGYAQVKTIDSELTRGIDQGEPTLTDVWMSHGDKVSKLPDGFAVIGNTPS CPIAMMENAQKQFYGIQFHPTEVTHTKQGRALLNRFVLDICGAQPGWMPNYYEEAVAKIREQVGSDEVILGLSGGV DSSVAAALIHRAGDQLTCVFDHGLLRNESKMVDMFARNLGVKVIVHDAEGQFMKLAGVTDPEKKRKIIGAE FIEVFDAEKKLTLNAKWLAQGTIYPDVIESAGAKTKKAIAKSHHNVGGLPENMKLKLLEPLRDLFKDEVRELGVA LGLPREMVRHPFPGPGLGVRLGEVKKEYADLLRQADDITQELRNTTENGTSWYDLTSQAFAVFLPVKSVGVM GDGRTYDYVIALRAVITSDFMTAHWELPYSLLGKVSNSIINEVKGINRVVYDVGSKPPATIEWE
182	1921	MSTQDLNGKIALVTGASRGIGAAIADTLAAAGAKVIGTATSESGAAAI SERI LAQWGGEGRVLNSAEPETIESLIAD IEKAFGKLDILVNNAGITRDNLLMRMKEEWDDIMQVNLSKVSFRASKAVLRGMMKQRSGRIINITSVVGVMGNAGQ TNYAAAKAGLIGFSKSMAREVGSRGITVCVAPGFIDTDMTRALPEETRQFTAQTLGRFGDAQDIADAVLFLAS DQAKYITGQTLLHVNGGMLP
183	1930	MMTQTLIELLTELPPKALNNLGNHFAASVAEGLAKEAQLVDGAAEFTAYASPRRLAVQVKNVKAVQADQKIVKG PAVANAMKDGAFTKALEGFARGAGAKIEDLTIVHDGKQDVYAYEVQIGKPLGGLLEDIINQAVKKLPIPKVMRWG SSTFTFVTPVHGLVVLHGDDIVNVSVLQSGNKTGHFLSDGEITIENADSYAAQMRQCKVVASFAERKAAIQ TVLEGQARRLNATAADEALLDEVTALVEWPVULEAGFEEHFLAVPQECILITMQQNQKYFPLLDQNGKLMNRFL VSNLQTEDPSHI IQGNERVLRARLSDAEFFYKQDQKATLESRLPKLTNVVYHNKIGSQAERIERLQSIAAHIAKAL GADAAAERAARLAKADLVTMVEFPELQTMGKYYARLDGETEEITAVEQHYPQPRFAGDNLPEGKIAAAVALA DKLETLVGIWGLIPTGDKDPYALRRAALGILRMLMQYGLDVNELIQTAFNSFPQQLLNKEKTPSETADFMQARLA VLLQNDYPQDIVAAVLAQPRRLDDLTAKLQAVAAFQQLPEAAALAAANKRVQNLLKKADAELGAVNESLILQDEE KALFAAAQGLQPKIAAAVAEGNFQTALESASVKPQDAFFDGVVMVMAEDAAVKQNRNLNRLAEQMNAAVALI LGE
184	1934	MSQGKIVQIIGAVVDVEFPRDMIPRVYDALKDENGLTLEVQQLGDBGVRVRAIAMGSSDGLKRGMTVSNTGAPITV PVGKGTLGRIVDVLGTPVDEAGPIDTDKSRAIHQAAKPFDELSSTTELLETGKIVIDLLCPFAKGKVGFLGGAGV GKTVNMMELINNIAKAHSGLSVFAGVGERTREGNDFYHEMKDSNVLKDVKAMVYQGMNEPPGNRLRVALTGLTMAEY FRDEKDENGKGRDVLFFVDNIIYRYTLAGTEVSALLGRMPSAVGYQPTLAEEMGRLQERITSTQTSITSIQAQYVP ADDLTDPSPATTFAHLDATVVLSDIASLGIYPAVDPLDSTSRSQLDPMVLQEHYDVARQVQSTLQKYKELRDIIA ILGMDELSDEDKLTVMRARKIQRFLSQPFHVAEVFTGSPGKYVALRTIAGFKAILNGEYDHLPEQAFYMGVSIIE AVEAKATLN
185	1936	MQLNPAPAEISDLIKAKIENLSVNAEVRTCGTVISVTDGIVHGLSDAMQGEMLEFPGNTFGLAMNLERDSVGAVVL GEYEHIKEGDTVCTGRILEVPVGRELVGRVVDALGRPIDGKPINNLTAPIEKAQPGVIAKSVQDPMQPTGLKA IDSMVPVGGRGORELIIQDRQGTGKTAVALDAIVNQKGTGVICIYVAIGQKASSIANVVRKLEEHGAMEHTIVVAAATA SEAAALQYIAPYSGCTMGEEFRDRGEDALIVYDDLSKQAVAYRQISLLLRRPPGREAYPGDVFYLHSRLERAARV NEHEVEKLTNGEVKGKGTGSLTALPIIETQAGDVSAFVPTNVISITDGQIFLETDLFNGIRPAINAGISVSRRVGA AQTKVIIKKLGGGIRLALAQYRELAAFSQFASDILDEATRKQLEHGEVVTELMKQKFSTLNNTAEMALTLWAINNGSY SDVPVAKALAFESFLSFVRTQHPEVLEAVNASGAMSDESEKTLEAAMKSFKSSYAYQA
186	1937	MAEFATIARPYAKALFGLAQEKNQIESWLGGLKLAAVVQEGKVASLIDRPTENASEKADILIDLVGLKDKELKNF VIVLAGQKRLSILPEVYAQYQDLTSLSFNHIKSAVIYSAPLTDKQVGEVLQMLNKRFDSELKISVEIEPELIGGIK

		VEVGQVLDSLQGKLSALYTTMTN
187	1938	MNINATLFAQIIVFFGLWFTMFKWPPIAKALDERAAKVAEGLAAAERGKDFEQAEEKVAELLAEGRNQVSEMV ANAEKRAAKIVEEAKEQASSEAARIAAQAKADVEQELFRARESLREQAVLAVKGAESILRSEVDASKHAKLDTL KQEL
188	1953	MMTLYSGITCPFSHRCRFVLYEKGMDFEIKDVIYNKPEDLAVMNPYNQPVPLVERDLVHESNIINEYIDERFPH PQLMPGDPVMRGRGRRLVLYRMKEKFNHFQVLENPAATNKEQAKAREAIGNGLTMLAPSFSKSKYIILGEDFSMIDV ALAPLLWRLDHYDVKLGKSAAPLLKYAERIFQREAFIEALTPAEKAMRK
189	1966	MSPSPFIEMKDVAFAVGDRPILKNINFSPQGNFAAVMGGSGSKTTMLRLITGQIRPQSGQVLIEGRDLAGFSAD ELYEHRRRMGVLFQHGALFTDLSVFDNIAFPRELTRLPEAVIRDLVLLKLNAGLGVENLMPSELGGMSRRVA LARTIALDPEIMLYDEPFTGLDPISLGVIAHLISRVNKALRSTSIVMTHDIEKSLEIVDQVIFLAHGEIMFSGSPQ EMRELDSPWVRQFVGGLADGPVAYRYPQTSLLQQDLLG
190	1968	MKQLAMYINGRFENDFNGEWRDVLPNSTEEIAREPKGKADVDRAAAQAQPAWERLPAVERGAYLRKIAQGI RERADELTDTIVAEggKTKDLARVEVMFTADYDQAEWARRYGEIITQSDRPRENILLFKRPLGVIAQILPWNFP FFLIARKMGPALVTGNTIVVKPSSVTPINCHIAEIVDAVGLPAGVFNVVNGPGAEIGNALSAHPQVDMVSLTGSV EAGRQVMEAAASANITKVSLELGGKAPAIKLKDADLLAVKSILASRVNGTQICNCAERVYVHSSLKDAFIEKMTA AMKGVRYGNPAEAEAGALEMGPLIEERAVKAVAEKVERAVKQGAKLVCGGKRAEGRGYFFEPTELLTDTDNSMDIMK EETFGPVLPVSAFDTLDQVIALANDCEFGLTSSVTTNLNEAFYVTRRLQFGETYINRENFEAMQGFHAGWKSGI GGADGKHGLEEYLQTQVYVLETDI
191	1982	MSNRPTLLLVDGSSYLYRAYHAMQNLTAPDGAPTGALYGVNLRRRLSEYPHDYCAVVDAGKNFRHQMFEEY KATRPPMPDDLQPAEALPDLVRLTGPVPLVIGQVEADDVIGTLAKQGAHGLRIVSTGDKDMAQLVDERVTLVN TMSSETLDIEGVAKFGVRPDQIRDYIALMGDKVDNPGVEKCGPKTAVKWLEAGSLAGVMEHASEIKGVGENL QAALPOLPLSYDLVTIKTDVDLHAELSDGIESLRRTPKWAQLVVDFKRWGFTWLKEAESNMNTGSTDLDLFGSDS IGEQAALNAEMPFEKQAEKATAPEKLDYQAVTTEAQFAALLDKLSRADTIGIDTETTSLDAMNASLVGISIAFQAG EAVYIPVGHSITAAPQDLDQDVLGRLKPHLNPAKKIGQNLKYDQHVFANYGIALNGIAGDAMLASYYIESHLG HGLDELSERWLGELETITYESLCGKGAKQIGFADVAIGQATEYAAQDADFALRLEAHLRAQMDEKOLEMELYKMEPLV AQVLFEMERNGVQIDRAELARQSAELGAELMKEQEAAYAAAGQPFNLSPKQLOEILFDKMGIPTKGLKTTAKGGI STNEAVLEQALAPDYPLPKIILQNRSLAKLKSTYTDKPEMISPDKGRVHTTYAQAVAITGRLASNNPNLQNIPIRT EEGRKVRAFTAPOGSVIVSADYSQIELRIMAHLSGDKTLIAAFQNGEDVHRRTAAEVFGTAPENVSSEQRYYAKS INFGLIYGMQYGLAKSLGIDNLSAKNFIDRYFARYPGVAEYMQRTKEQAAAQGYVETLFGRRLLYLPDIRNKNANA RAGAERAAINAPMQGTASDLIKRAMIDVSRWLSECEASPVWDELLQSKLIMQVHDELVLEVETELEDFVKEKLPQIM AKVDDGGLLDVPLVAEVGVGENWEEAH
192	1996	MSVVLPLRGVTALSDFRVEKLLQKAAALGLPEVKLSSFWYFVGSEKALDAATVKEKLQALLAQSVEQTPKAREGL HLFLVTPLRGTTISPWASKATNIAENCGLAGIERIERGMAVWLEGRNLDEQKQWAALLHDMRTESVLPDFQTASKL FHHLESETFSGVDVLGGGKEALVKANTEMLGALSADEIDYLVENYQALQRNPSDVELMMFAQANSEHCRHKIFNAD FILNGEKQPKSLFGMIRDTHNAHPEGTVVAYKDNSVIEGAKIERFYPNAEENQGYRFHEEDTHIIMKVETHNHT AIAPFAGAATGAGGEIRDEGATGKGSRKPKAGLTGFTVSNLNPDLKQPWEQDYGKPEHISPLDIMIEGPIGGAASF NNEFGRPNLGLYFRTFEEKFDGQVRGYHKPIMIAGGLSIIQAOQTHKDEIPEGALLIQLGGPGMLIGLGGAAASSM DTGTNDASLDFNSVQRGNPEIERRAQEVIDRCWQLGGKNPIISIHDVGAGGLSNAFPELVNDARRGAVFKLREVPL EEHGLNPLQIWCNCESQERYVLSILEKLDCAFRAICERERCPFAVVTATDDGHLKVRDDLFAANPVDLPLNVLLGK LPKTTRTDKTVAPSKKPFHAGDIDITEAAYVRLPAVAKNFLITIGDRSVEGGIETHRDQMVGYQTPVADCATM MGFNTYRGEAMSMGEKPTVALFDAPASGRMCVGAEITNIAAVNIDIGNIKLSANWMAACGNEGEDEKLYRTVEAV SKACQALDLISIPVGKDSLMSMKTWQDGEEKSVVSPSLIISAFAPVKDVRKTVTPELKNVEDSLLFVDLFGFKA RMGGSAFGQVYNNMSGDAPDLDDTGRLKAFYSVIQLVAENKLAYHRSDDGGLFAVLFEMAFAGRCGLDIDLNL LAQTFITNHTALSQSLRTTEEVKALAEWQETIARTLFNEELGAVIQRKQDVADIINLFYQQQLHHNVFEIGTLTDE NTLIIIRDGQTHLISDNLIKLQQTWQETSHQIQLRDNPACADSEFALIGDNERALSADFVFDVNEDIAAPFINSG AKPKIAILREQGVNGQIEMAAAFTRAGFDAYDHMSDLMAGRIHLADFKMLAACGGFSYGDVLGAGEGWAKSILFH PALRDQFAAFFADPDTLLGVCNGCQVSNLAEIIPGTAGWPKFKNLSEQFEARLSMVHPKSASLILNEMQSS LPVVVSHGEGRADFALHGGNISADLGLQYIDGQNQVTQTYPLNPGSPQGIAGVTNADGRITIMMPHPERVYRA AQMSWKPEGWTELSGWYRLFAGARKALG
193	2000	MNQTAIRADVRTRFIFFDMPVRGLHVRLENVWQHIVKQKNYPAAIRRALKELLAAGVLLSGNLKNEGTLIVQVQG RGRLKMLVAEAASDRTVRATARWDETAEIADDESGLDILGEGGVFVLTLPQPKDGEWPQGVVPLEGGGIAQMLVNYM KRSEQLDTHIVLVSASDEAAGGLLVLQRLPEEVLDDEAWEHVSTLARTLTAEELAGLDAQHVLYRLFHETPPRVEPE TEFEFSCTCSRKGKVSMDLMLGGEEVGVVVEQGSIEVDCDFCHSKYVFDETDNALFGEDVVGVAKGLPRTHTVQ
194	2039	MKKSLIALTLAALPVAAMADVTLYGTIKAGVETRSVHFQNGQVTEVTTATGIVDLSKIGFKGQEDLGNGLKAIW QVEQKASIAGTDGSGWGNRQSFIGLKGFGKLRVGRNLNSVLKDTGDPWDNSKSDYLGVNKIAEPEARLISVRYDSP EFAGLSGSVQYALNDNAGRHNSESYHAGFNYKNGGFFVQYGGAYKRHHQVQEGLNEIEKYQIHLVSGYDNDALYAS VAVQQQDAKLTDAHSNSHSQTEVAATLAYERGNVTPRVSYAHGFKGLVDDADIGNEYDQVVAEYDFSKRTSALV SAGWLQEGKGENKFVATAGGVGLRHF
195	2057	MKTFSAKPHEVKREWVFIADAQDKVLGRVAAEVASRLRGKHKEYTPHVDGDIIVINADKLRVTGAKFEDKKYFR

		HSGFPGGIYERTFREMSEQFPGRALEQAVKGMLPKGPLGYAMIKKLKVYAGAEHAHAAQQPKVLELK
196	2079	MKVGFGWGRGMVGSVLMQRMKEENDFAHIPEAFFFTTSNVGGAAPDFGQAAKTLDDANNVAELAKMDIIVTCQGGDYTKSVFQALRDSGWNGYWIADAASSLRMKDDAIIVLDPVNRDVLDNGLKNGVKNYIGGNCTVSLMLMALGGLFQNDLVEWATSMTYQAASGAGAKNMRELISGMGAVHAQVADALADPAGSILIDRKVSDFLRSEDYPKANFGVPLAGSLIPWIDVDLGNQGSKEEWKGGVETNKILGRSDNPTVIDGLCVRGAMRCHSQAITLKLKKDLPVSEJETILAGANDWVKVIPNEKEASIHETPAKVTGTLSPVGRIRKLGGMGEYISAFTVGDQLLWGAEEPLRRVLRIVLGS
197	2086	MKFIDEAKIEVAAGKGGNGATSFRREKFVPRGGPDGGDGKGGGSVVAEADENTNTLVEYRFVKRYQAKNGEKGHGSDRYGAGADDIVLKMPVGLIRLDLDTGETVADLTYHGQRVCLAKGGKGGLGNIFHKSSVNRAPKQSTPGEEGEARSLOLELKVLADVGLLGMPNAGKSTLITAVSAARPKIANYPFTTLHPNLGVVRIDENHSFVMAIDIPLGIEGAAEGAGLGHRLFKHLRSRTGLLHVVLDAPFDETVPAAEALAIINELRKYDEELYGKPRWLVLNKLDMLDEEEAQTRAAFLEAVGWDPKPDDRQFDMETPRLFQISALTHQGTQELVHQINQYLTTEKKRKEAEKAANVIEQQPKTDGFKPE
198	2101	MSQITMRQMIIEAGVHFQHQTFRWNPKMAQYIFGARNKIHIVNLEKTLPMFQDAQEAVRRLVANKGTVLFGVTKRQARDIIREEATRAGMPFVDRWLGGMLTNYKTVQKSISKRLEEKTALENAAESGFSKKEILEMQRDVKEKLERSLGGIKNMKGLPDAIFVIDTGYQKGLVVAEKLGPVIAVVDTNNSPDGVKYVIPGNDDSAKAIRLYCRIADAVLEGKNQALQETVAAAQEEAAAE
199	2102	MAEITAKMVADLRAATGLGMMEECKKALVEAEGRNFKAEEILRIKSGAKAGKLAGRTAAEGVLAYAINGNVGALVEVNCTDFVAKDAGFVEFANFVAKTAAEKKPASVEELSELVEAERKAIIAKLGEMNSVRRFQVIDTANQLVAYIHGALATEGVLYKGSEDVARKIGMHIVAAKPQCVSEAEVDAETVEKERHIYTEQIAASGKPADIAAKMVEGRIRKFLAEITLNGQAFVMNPDQTVQFSKENGTEVISFVRYKVGDGIEKKAVDYAAEVAAAKV
200	2103	MTQQIKYKRVLLKLSGESLMGSDPFGINHDTIVQTGEIAEVVKMVGQVGVIVVGGGNIFRGVSAQAGSMDRATADYMGMMATVMNALALKDAFETLGIKARVQSAALSMQQIAETYARPKAIQYLEEGKVVIFAAGTGNPFTTDAAALRGAEVNCDVMLKATNVDGVTADPKKDPSATRYETITFDEALLKNLKVMDATAFALCRERKLNIVVFGIAKEGSLKRVITGEDEGTLVHC
201	2129	MSQNHTILQSLPVGQKVGIAFGSGGLDTSAALLWMKLKGALPYAYTANLQGPDEDDYNAPIKKAMEYGAENARLIDCRAQLAHEGIAAIQCGAFHVSTGGIAYFNTTPLGRAVTGMLVSAMKEDDVNWIWGDGSTYKNDIERFYRYGLLNPALKIYKPWLDDQFQFIDELGGRHEMSEFLIANGENYKMSVEKAYSTDNSMLGATHEAKDLEFINSGIKIVKPIMGVAFWDENVEVSPEEVSVRFEFGVPAVLNGKEYADPVELFLEANRIGGRHGLGMSDQIENRIIEAKSRGIYEAPGMALFHIAAYERLVTGIIHNEDTIEQYRINGLRLGRLLYQGRWFDSQALMLRETAQRWVAKAVTGEVTLELRGGNDYSILNTESPNLTYQPERLSMEKVEDAFTPLDRIGQLTMRNLDITDTRVKLGIYSQSGLLSLGEGSVLPQLGNKQ
202	2138	MEAEVINQNNNTLDLEKRSEDIRVYMDYQGKKDRLEEVIGLSEDFELWNDPKRAQEIGKERKILEGIVLTLNDNIA SGIEDNRMLIEMTVEENDEEGFAAVQEDVAGLEKQOMADLEFKRMFNQPADPNCFIDITAGAGGTEAEDWAGMLFRMYSRYAERKGFRIEILEEDDGEIAGINRATIRVEGESEYAYGLLRTETGVHRLVRYSPFDSNNKRHTSFASVFVYPEIDDSIEIEINPADLRLDTYRASGAGGQHINKTDSAVRITHEPTGIVVQCQNDRSQHANKAAAMEMLKSLYELEMRKRNEEKQALEEGKSDVGWSQIERSYLDSSRIKDLRTGYEVGNTKAVLDGDLDFIEASLKQGV
203	2154	MSVLIIVEHDNKQLNPTTLHAVTAAAKLGKVDLLVAGNGASAVVEFAKQVAGVKVLVADAAYAEGLAEELAPLVKLAADYRYVAATATTFGKNLLPRVAALLDVPQISDLTEIVDNTTFVRPIYAGNAFETVQADSEKLVLTFRATVFD AVAAQGGNAEVINVEATPAQNLSRFVNRLQSHSDRPELTQAKVIVSGGRALGSAEKFNEVLTPLADVLGAIAIGASRAAVDAEYAPNDAQVGQTGKVVAPQLYFAIGISGAIQHVAGMQDSKVIVAINKDADAPIFNVADYGLVGDLFEIVPQLTEVLKN
204	2155	MKALVAVKRVVDYNVVKRVKADGSDVDIGNVKMSMNPDEIAVEEAVRLKEAGKVSEIVAVSLGEKKCEETLRTALAMGADRAIHVTDTKLESLAVAKLLKAVADKENPQIFFLGQAIIDDDANQVQAMLAALLNAAQGTFASKVQIEGDEQVIVREIDGGEETIALKLPAVISADLRLNEPRFVLPNIMAACKKPLEKLTDDLADISPLKTVKFAEPKARQAGVKVASVAELVEKLKNEAKVI
205	2159	MSIKVAINGFGRIGRLALRQIEKAHDIEVVAVNDLTPAEMLLHFLKYDSTQGRFQGTAELKDDAIIVNGKEIKVFPANPNPEELPWGELGVDVILECTGFFTNKTKAEAHIRAGARKVVIISAPGGNDVKVYVGVNQDILDGSETVISAASCTTNCLAPMAAVLQKEFGVVEGLMTTIHAYTGDQNTLDAPHRKGDLRRARAALNIVPNSTGAAKAIGLVIPELNGKLDGSAQRVPVASGSLTELVSILERPVTEEINAAMKAAASESYGYNEDQIVSSDVVGIEYGSLFDATQTRVMTVGGKQLVKTVAWYDNEMSYTCQLVRTLEYFAGKI
206	1126 1164	MKTVSTAVVIAAAAVSLTCATESSRSLEVEKVASYNTQYHGVRTPISVGTFDNRSSFQKGIFSDGEDRLGSQAKTILVTHLQQTNRFNVNRTNLNALQKQESGIISGKAHNLKGADYVVTGVDTEFGRDVGDHQLFGILGRGKSIAYAKVALNIVNVNTSEIVYSAQGAGEYALSREIIGFGGTSGYDATLNGKVLDLAIAREAVNSLVQAVDNGAWQPNR
207	1799	MSEYLFTSESVSEGHPDKVADQVSDAIIIDAILAQDPKARVAAETLVNTGLCVILAGEITTTAQVDYIKVARETIKRGYNSELGFIDANGCAVGVYYDQQSPDIAQGVNEGEIGIDLNQAGDQGLMFGYACDETPTLMPFAIYSHRLMQRQSELRLKGDRGLPWLRLPDAKAQLTVVYDSETGKVKRIDTVVLSTQHDPSSIAYEELKNAVIEIIKPVLPSELLTDETGYLINPTGRFVIGGPQGDCGLTGRKIIIVDTYGGAAPHGGGAFSGKDPSKVDRSAAYACRYVAKNIVAAGLATQCQIQSYAIGVAEPTSISIDTFTGTGKISEEKLIALVREHFDLRLPKGIVQMLDLLRPIYSKSAAYGHFGREEPEFTWERTDKA

		AALRAAAGL
208	0110	MALLNILOQYPDERLHTVAKPVEQVDERIRKLIADMFTEMYESRGIGLAATQVDVHERVVMDLTEDRSEPRVFNP VIVEKDGETTYEEGCLSPVPGIYDTVTRAERVKVEALNEKGEKFTLEADGLLAICVQHELDHLMGIVFVERLSQLQG GRIKTKLKKRQKHTI
209	0957	MSQYDWWVIAGPGGYVAAIRAAQQLGFKTAACVAGVNKAGNAPALGGTCLNVGCIPSKALLQSSHFHAAQHEFAE EGITVGDVKFDAAKMIERKDAIVTKLTGGVFKLFQKNKVTSLFGTASFAGKNGDAYQIEVDNKGEKTVIEAKHIV ATGSVPRPLPQVAIDNVNVLNDNEGALNTEVPAKLGIGSGVIGLEMGSVWNRVGAEVTLLEAAPTFLAAADQQIA KEAFKYFTKEQGLSIELGVKIGDIKSEGKGVSVAYETAAGEAKTEVFDKLIVAIIGRIPNTKGLNAEAVGLEKDERG FIKVDGECRTNLNVWAIGDVVRGPMLAHKASDEGVAVAERIAGQKPHIDFNVPFVITYTDPEIAWVGKTEEQLKA EGVEYKKGTSFGANGRALAMGKAKGTVKLADAKTDRILGVHMIGPVVSELVTEGVTALEFFASSEDIARIIH PTLSEVVHEAALAADKRALHG
210	1011	MMIEKSISIVDGKEYSVFAVSHEFRYTFDEPILVADLISSLKAYETLTSSYLPAILNQLFDVKIQKIKVAVSEIER GSFLEKLIFNLFFKDDEDAYNEFCLKIRKFLGTENQDGSIINMSKIIIMFAMTLLGVGAGYLLFKNPPQEKOAITNNI VTVINADSSVALDGEHLSVVKVEVTGSSKQKTAENVAKVYAPASKNNNGSITLGTDDVRIEPAQQTVATLPKDVL RDTPLTEDYTDIDVQIRATDRDKNSGWYAVIDQIVPSVRLELPEDIDLNRANNATIRANVTVEFDLKQNGSRPK KKIILTLSSTD
211	1055	MFSKSVTLAQYDPDLAAAIAQEDQRQDHVELIASENYVSCAVMDAQGSQLTNKYAEGYPGKRYYGGCEYVDIVEQ LAIDRVKELFGAAYANVQPHSGSQANQAVYASVLKPGDTILGMSLAHGGHLTHGASVNISGKLYNAVTYGLDENEV LDYAEVERLALEHKPKMIVAGASAYALQIDWAKFREIADKVGAYLFVDMAHYAGLVAGGEYPNPVPCDFVTTTH KTLRGPRGGVILCRDNTHEKALNSSIFPSLQGGPLMHVIAAKAVAFKEALQPEFKQYAKQVKINAAMAAELVKRG LIVSGRTESHVFLVLDLQPMKITGKAAEAALGKAHITVNKNAIPNDPEKPFVTSGIRIGSAAMTTRGFNEADARVL ANLVADVLSNPEDEANLAKVRKVTAICNKPVYGA
212	1437	MSARENILAKLKKADALPMEEPAVFDDYYREMGVSWGSEVERLKHWAAMRAVKTEIYWVTKSNWMOVFRREAAEGKG LKNILLPLATEHQIARAALADSNIEPIAFEREIDTWKTEFFTNIDAGFSGAQCIGARTGTLMLFSSPEPRTLSL VPPVHFCLFDTSKMYNEFHNAVEGEKLVENGMPTNFLISGPSKTADIQLTLAYGAHGPRLVLVILAILPDHISPAD LEENA
213	1460	MSLNKVILIIGRLGRDPEVRYMPNGEAVCNFSVATSETWNDRNGQRVERTEWHNITMYRKLAETIAGQYLKKGGLVYL EGRIQSRKYQGKDGIERTAYDIVANEMKMLGGRNENSGGAPYEGYQGSQEAYQRPAQQRQPSDAPSHPQEAPA APRQRQPVAAAPVEDIDDDIPF
214	1540	MNKKHGFLTALAIATAFPAYAAQAGGATPDAAQTSQSLKEITVRAAKVGRRSKEATGLGKIVKTSETLNKEQVL GIRDTRYDPGVAVVEQNGASGGSIIRGVDKNRVAVSDGVQAIQIAQFTVQGSSLGQGGGGSGAINIEIYENIST VEIDKGAGSSDHGSGALGGAVAFRTKEAADLISDGKSWGIQAKTAYGSKNRQFMKSLGAGFSKDGWEGLLIRTERQ GRETRPHGDIADGVEYGIIDRLDAFRQTYDIKRKTREPFFSVEGERESKPVAKLAGYQKYLNNQLNRWVKERIEQNQ PLSAEEEAAQVREAQARHENLSAQAYTGGRILPDPMYRSGSWLAQKLYRFGGRHYVGGFEDTKQRYDIRDMTEK QYYGTDEAEKFRDKSGVYDGDDFRDGLYFVNPIEEWKGDKNLVRIGLKYRSRTKFIDEHRRRRMGLLYRYENEAY SDNWADKAVLSDFKQGVATDNNTLKLNCAVYPAVDKSCRASADKPYSYDSSDRFHYREQHNVLNASFESLKNKWT KHHHTLGFGYDASKAISRPEQLSHNAARISESTGFDENNQDKYLQKPEVVEGSGVCGYIETLRSRKCVPRKINGSN IHISLNDRFSIGKYFDFSLGGYDRKNFTTSEELVRSGRYVDRSWNSGILFKPNRHFVSYRASSGFRTPSFQELF GIDITYHDYPKGWQRPAKSEKAANREIGLQWKGDFGLEISSFRNRYTDMAVADHKTLPNQAGQLTIEDIRDYY NAQNMISLQGVNILGKIDWNGVYGKLPEGLYTTLAYNRIKPKSVSNRPGSLRSYALDAVQPSRYVLGFQYDQPEGK WGANIMLTYSKGKNPDELAGDQKRYSTKRASSWSTADVSAYLNKKRRTLRAAIYNIGNYRYVTWESLRQTA ESTANRHGGSNSYGRYAAPGRNFSLALEMKF
215	1554	MTKFIFVTGGVVSSLGKJAAASIAAILESRGLNVMLKDPYINVDPGTMSPFQHGEVFVTDGAETDDLGHYE RFIDSTMTRNSFSTGQVYENVIAKERRGDYLGTVQVIPHITDEIKRRIHEGAAGYDVAIVEIGGTGDIESTLPF LEAIROMRSQQLGRNNNTLEFAHLSYVPYIAAAEIKTPKTQHTVKEMLSIGLQPDILICRMDRTMPADERRKIALFCN VEERAIVGSDVDSIYECPEMLHDQGIDNITEQLQNVQQADLTAWKKVHAIQNPKHTVKIAMVGKVYDLESY KSLIEALKHAGIHTETDVQITFVDSENIEKNGDVSMLKMDAIIQVPGFGSRGVEGKIAAVRYARENVPYLGIC LGMQIALIEYARDVAGLKGANSTEFDLKCAAPVVALIDEWQTAGSVETRDESTDGGTMRLGAQEVELKAGSLAA KIYGSIGHIRERHRHRYEVNNNYVPTLEQAGLVIGGVSAGRERLVTIELPNHPWFFACQFHPEFTSNPRKGHLFT AFVKAALNNKA
216	1576	MRHILSVLIENESGAMSRRVGLFSARDYNIDSLAVAPTEDKTLSRMTIVTHGDEQVIEQITKQLNKLIEVIKVVDL NESRFVERELMLVKVRAAGKDRDEFLRLTEIYRGSIIDVTDRSYTIEITGSTDKLDSTFLETVGRQILETVRTGAA GIGRGERILKI
217	1808	MRLFKSLKNPKKTDALKPKSSGLNNRAIIGIDIDQHSIKMVQLSGRSLSNQIQLKEVIAKLPNIIQGNKVQNYD QLVTLQOQAYAKLGTSCNNIISAVPQNLATIEQLTYTDKDAELDLQGFVESSISEVSSISLEEANYDYQVLSQSA GEAVLAVASRKDEIEPLIDAFNAAGMQLSALDVDIFGQYNAVALWINHFAPELAAEKVIAFGVYAAQTYALVIQDG KILYKOETSSEEQLNQLIQRTYQVTEEKAAEIIINSPQKPSDYQESVANYFNQQITQEIQRVLQFYTTQTADDMT DIKHILLTGEAARQEGIAQTVASQTNADVQCVHPARYFADNLKTDQFELDAPLTLRAFLAVRGL